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BALTIMORE, DECEMBER 16, 1909.

FOR THE SOUTH.

The January 6th issue of the MANUFACTURERS' RECORD will be one of the most important publications ever issued about the South or in the interests of the South's development. It will contain many notable articles by many noted men. If you are interested in any phase of Southern progress or prosperity, if you want to know about your country, its resources and its possibilities, you will have to read that issue. No man in the South can afford not to know about his own section. It is incumbent upon him to understand the foundation on which the South is building, in order that he may the more broadly grasp the opportunities that it presents. No man living in other sections of this country can afford not to know about the South. Its development means the enrichment of the nation, and every business man is necessarily interested in knowing of the progress and prosperity of every portion of our country. The South as the coming center of material activity, of railroad construction, of iron and steel development, of cotton manufacturing—the coming center of vast progress in every line of human activity—appeals naturally to the sentiment of the world. In our issue of January 6th there will be many broad articles covering the South, telling of what it has, and what it is doing, and the man who wants to take a bird's-eye view of this section and all its wealth of resources cannot afford to miss that issue.

VALUE OF COTTON VS. WORLD'S GOLD AND SILVER.

[From the copyrighted booklet, "Manufacturers' Record's Annual Blue Book of Southern Progress, 1909."]

That the value of the South's cotton crops, including seed, in the decade 1899-1908 exceeded by \$2,505,140,300 the value of all the gold produced in the world and by \$1,472,980,300 the combined values of all the gold and silver produced in the world in that period is a fact not generally appreciated, but one emphasizing the significance of the South's practical monopoly in the cotton production of the world. That the value of the exports of raw cotton from the South exceeded by \$13,891,682 the output of all the gold mines in the world in that period, points to the importance of cotton in the commerce of the United States. Comparison of the value of the South's cotton crop with the value of the world's gold and silver output and the value of exports of cotton with the value of world gold production by years is made in the following table:

VALUE OF COTTON CROP VS. GOLD AND SILVER PRODUCTION.

Year ended August 31,	Cotton, including seed.	Calendar year.	World's gold and silver production.	
			Gold.	Silver, bullion value.
1898-1899.....	\$323,000,000	1899.....	\$306,724,100	\$101,255,000
1899-1900.....	404,000,000	1900.....	254,576,300	107,626,000
1900-1901.....	534,000,000	1901.....	260,992,900	103,097,000
1901-1902.....	512,000,000	1902.....	296,737,600	85,922,000
1902-1903.....	552,000,000	1903.....	327,702,200	90,981,000
1903-1904.....	673,000,000	1904.....	347,377,200	95,010,000
1904-1905.....	683,000,000	1905.....	380,288,700	105,168,000
1905-1906.....	715,000,000	1906.....	401,973,200	112,030,000
1906-1907.....	796,000,000	1907.....	410,555,300	122,386,000
1907-1908.....	742,000,000	1908.....	441,932,200	108,685,000

Total for 10 yrs. \$5,934,000,000 Total for 10 yrs. \$3,428,859,700 \$1,032,160,000

Total value of cotton crop, including seed, for 10 years.....\$5,934,000,000

Total value of world's gold and silver output for 10 years.....4,461,019,700

Excess of cotton value over gold and silver production for 10 years..\$1,472,980,300

VALUES OF RAW COTTON EXPORTS AND OF GOLD PRODUCTION.

Fiscal year	Raw cotton exports.	Calendar year.	World's gold production.
1898-1899.....	\$209,564,774	1899.....	\$306,724,100
1899-1900.....	241,832,737	1900.....	254,576,300
1900-1901.....	313,673,443	1901.....	260,992,900
1901-1902.....	290,651,819	1902.....	296,737,600
1902-1903.....	316,180,429	1903.....	327,702,200
1903-1904.....	370,811,246	1904.....	347,377,200
1904-1905.....	379,965,014	1905.....	380,288,700
1905-1906.....	401,005,921	1906.....	401,973,200
1906-1907.....	481,277,797	1907.....	410,555,300
1907-1908.....	437,788,202	1908.....	441,932,200

Total.....\$3,442,751,382 Total.....\$3,428,859,700

In 10 years the South's raw cotton brought back in gold or credits to the United States more than \$3,442,000,000, and to this should be added many millions of dollars in return for the exports of manufactured cotton and of cottonseed products.

COTTON, THE SALVATION.

The November statement of exports shows that the Southern cotton crop still ranks as the leader in the salvation of our country's commerce this year. Of leading articles in domestic exports cotton is one of the three showing an increase in value in November, 1909, over November, 1908, and it is the only article showing an increase in value in the eleven months of this year over the eleven months of 1908. The comparison of the eleven months in the two years is made in the following table:

Articles.	1908.	1909.
Corn.....	\$20,526,964	\$29,411,292
Wheat.....	85,677,148	45,081,675
Flour.....	55,259,644	43,577,049
Other foodstuffs.....	8,448,946	5,668,238
Meat and dairy prod- ucts.....	144,667,090	121,466,972
Cattle, hogs, sheep.....	22,483,800	14,113,553
Cotton.....	366,298,266	407,511,517
Mineral oil.....	97,147,990	91,715,167
Total.....	\$800,509,948	\$749,545,463

In November, 1909, the increase over November, 1908, of \$1,526,946 in the value of wheat exports was accompa-

nied by an increase of 1,689,064 bushels and of \$1,202,251 in the value of mineral oil exports by an increase of 29,375,269 gallons exported. The increase of \$16,153,814 in the value of cotton exports in that month was in the face of a decrease of 139,082,108 pounds exported. In the eleven months of this calendar year the increase over eleven months of 1908 of \$41,213,251 in the value of cotton exports was in the face of a decrease of 33,667,967 pounds. In the articles considered there was, excluding cotton, a decrease in the eleven months of \$92,177,636.

SOUTHERN MINERALS.

Statistics published from time to time by the MANUFACTURERS' RECORD in the past few months have shown in striking manner the effect upon mineral production in 1908 of the financial disturbance of the winter of 1907-08. The figures have recorded only a temporary setback, of course, and have been valuable chiefly in giving opportunity for a comparison of the South with the rest of the country. Complete figures for 1908

enable one to compare with 1907 by States as in the following table:

States.	1907.	1908.
Alabama.....	\$52,136,749	\$35,010,808
Arkansas.....	6,386,747	5,348,907
Florida.....	7,365,754	9,167,762
Georgia.....	6,641,003	5,200,881
Kentucky.....	19,294,341	16,141,566
Louisiana.....	10,876,719	12,113,009
Maryland.....	19,356,250	11,489,062
Mississippi.....	1,924,302	974,518
North Carolina.....	2,961,381	2,145,947
South Carolina.....	2,305,203	2,081,001
Tennessee.....	26,525,004	19,277,031
Texas.....	19,806,468	15,212,929
Virginia.....	19,313,182	13,127,395
West Virginia.....	92,487,960	77,465,737
Total.....	\$286,481,653	\$224,756,943
United States.....	2,671,907,964	1,595,679,186

It will be noted that while the decrease in 1908 from 1907 in the whole country was from \$2,071,907,964 to \$1,595,679,186, or by \$475,937,778, equal to 22.9 per cent., and in the rest of the country outside the South from \$1,785,126,911 to \$1,370,913,243, or by \$414,213,668, equal to 23.2 per cent., the decrease in the 14 Southern States was from \$286,481,653 to \$224,756,943, or by \$61,724,110, equal to 21.5 per cent.

There were increases in but nine States and Territories—Alaska, 2.93 per cent.; California, 14.92 per cent.; Florida, 24.46 per cent.; Iowa, 2.64 per cent.; Louisiana, 11.37 per cent.; Nebraska, 3 per cent.; New Hampshire, 16.10 per cent.; Oregon, 3.97 per cent., and South Dakota, 72.68 per cent.

CALLS FOR OUR ANNUAL BLUE BOOK OF SOUTHERN PROGRESS.

In the MANUFACTURERS' RECORD of last week was announced the publication of our "Annual Blue Book of Southern Progress." By the first mail after the receipt of the MANUFACTURERS' RECORD there came a letter from Mr. Thos. W. Shelton of Norfolk, Va., in which he said:

Enclosed please find \$1 to pay for four copies of "Annual Blue Book of Southern Progress." Please mail one of these directly to my address at Norfolk; one to Mr. David Bennett King, 165 Broadway, New York city, enclosing my card, and one to Mr. Samuel Ludlow, Jr., president Union Trust Co., Jersey City, N. J., and one to Mr. Erskine Hewett, 50 Church St., New York, N. Y.

And by the first mail possible after the receipt of the paper came a letter from the Lutheran Board of Publication of Columbia, S. C., ordering 100 copies of the Blue Book of Southern Progress, with the statement:

We have decided to advertise this book in our publication, the *Lutheran Church Visitor*.

We presume that the Lutheran Board of Publication, recognizing that the facts contained in the "Annual Blue Book of Southern Progress" are of vital interest to every man in the South, because they bear upon every phase of Southern life, upon the possibilities of this section, upon its growth and wealth and population, and, therefore, bear upon the extension of religious activities on the part of every denomination, is desirous of inducing the Lutherans of the South to study these facts in order to quicken their interest and enthusiasm in the work of the Lutheran Church.

And then the Lynchburg Chamber of Commerce, recognizing the very great

value of the widest distribution of such a survey of the South, and its resources and progress, sent an order for 5000 copies with a four-page introductory matter by the Lynchburg Chamber of Commerce, setting forth the particular advantages of that community and of Virginia. These 5000 copies are to be mailed by that organization to business people throughout the country in order to interest them, first, in the South, and then to concentrate their attention upon Virginia, and finally to bring it specifically down to Lynchburg.

From South Carolina there comes a letter asking for a copy, with the statement that while in Washington a friend connected with the Southern Railway Company had telephoned the writer that this Blue Book was a "corker," and so a copy is desired by the earliest possible mail.

These are given as illustrative of the interest which has been immediately aroused throughout the South, as well as throughout the North and West, in this "Annual Blue Book of Southern Progress." The MANUFACTURERS' RECORD, at its own expense, is distributing free of cost 30,000 copies in the interest of Southern development. This, however, completes its free distribution. To those who want any number up to one hundred copies, the price is 25c. per copy. To those who want a few hundred, or a few thousand copies for distribution in the interest of Southern development special rates will be made.

THE COKING COAL SITUATION.

A Pittsburg dispatch to the *New York Times*, referring to the fact that plans were announced by the Steel Corporation for building of by-product coke plant at Girard, Ohio, says:

This is the first time the Steel Corporation has planned by-product coke ovens within shipping radius of the Connellsville coke fields. The coke trade take this to mean that the H. C. Frick Coke Co. has reached its maximum output and is to decline gradually. Heretofore the Steel Corporation authorities had always accepted the Connellsville doctrine that by-product coke ovens could not turn out a grade of furnace coke to compare with the wasteful beehive ovens of the Connellsville field. Steel Corporation officials are quoted as saying informally that no more ovens of either beehive or by-product type will be built in the Connellsville region. The plants of the Frick Company will be allowed to gradually decline and go out, their capacity to be replaced by by-product plants contiguous to the corporation furnaces.

If the statements made in this dispatch are correct, this move is probably due in part to the fact that the Connellsville field is being very rapidly exhausted. That region which has been the center of coke-making in the country, having about 40,000 coke ovens in operation, and shipping as much as 450,000 tons of coke a week at times, must, as has been foreseen for some years, rapidly decline in relative importance in the coke trade of the country. The exhaustion of the field is practically in sight, and with the tracts of coal land not yet absorbed by coke-making firms in the Connellsville region held at considerably over \$3000 an acre, and reported in a recent conversation with a leading banker of Uniontown to be held at \$6000 an acre, it is but natural for the Steel Corporation, which looks far ahead in its plans, to be building by-product coke ovens elsewhere in order to be ready to take care of its needs as the Connellsville field plays out.

This, however, only emphasizes the importance of Southern coking coal fields and brings into clearer view the recent prediction made in the MANUFACTURERS' RECORD by Prof. John J. Por-

ter, of the University of Cincinnati, who in his forecast as to iron production said:

The situation with respect to fuel supply has already been discussed, and it is pointed out that the iron industry of the future will have to depend chiefly upon West Virginia and Eastern Kentucky for its coking coal.

In this survey of the situation Professor Porter was not only taking into account the development of iron and steel on the Lakes and at Pittsburg, but also on the seaboard, at Baltimore and other South Atlantic ports.

ON ADVERTISING AGENCIES.

For many years the MANUFACTURERS' RECORD has held that an advertising agency is necessarily the agent of the advertiser for whom he does business and not an agent for the newspaper to whom business is sent. The relation between the business concern and an advertising agency which it uses in placing its business is very clear. If properly understood neither the business man handling his advertising in that way nor the agency could for a moment consider the question of the latter's seeking to get a commission from a newspaper for placing business with it any more than a reputable agent of a railroad or other corporation buying merchandise for it would expect to get a commission from the seller.

Holding this view, the MANUFACTURERS' RECORD, without any ill-feeling for the many reputable advertising agencies in the country, absolutely refuses to pay a commission to any agency for any business sent to it. At times some agents, failing to understand the proper relationship which exists between them and their clients, refuse to give business to the MANUFACTURERS' RECORD because it will not pay them a commission for it. In doing this they are necessarily placing themselves in a false position. They are not the agents of the MANUFACTURERS' RECORD, and, therefore, are not entitled to pay by us. They are the agents of their clients, and if they are working for the benefit of their clients, the latter should pay them for their services. Any agent who places himself in any other position is, according to the views of the MANUFACTURERS' RECORD, looking at the situation from an erroneous point of view. Necessarily any other system than that adopted by the MANUFACTURERS' RECORD puts the agent in a position of embarrassment, because if he declines to give business to a publication he lays himself open to the charge in the thought of his clients that his refusal to do so is because of his failure to get a commission, and that, therefore, he is working, not for their interest, but for his own individual profit.

It is a rather remarkable situation that the false basis on which advertising agencies have so long existed should be tolerated for so many years either by advertisers or the reputable agencies themselves, or by newspapers. The MANUFACTURERS' RECORD knows that because of its policy in this respect some agencies have refused to send business to it and have sought to misrepresent its value as an advertising medium. It has been advised repeatedly by agencies who were representing reputable clients that if it refused to pay them a commission it could not have the business controlled by them. If they were working in the interest of their clients such a position would be absolutely untenable.

More and more there is being developed a sentiment to the effect that any agent employed to place the advertising

of business houses must be in the employ of the advertiser and not of the newspaper. His judgment under such circumstances cannot be warped by his own personal profit or lack of profit.

These points are very strikingly presented in a recent pamphlet by Mr. R. R. Shuman, who has had many years experience in editorial work for leading publications and long experience in connection with a leading advertising agency. Mr. Shuman lays down two axioms, as follows:

Axiom No. 1.—The trade paper that pays or offers to pay an agency a commission places itself under the same suspicion that the seller of building supplies does who offers an architect a bribe.

Axiom No. 2.—Trade papers offer a more select audience of readers with larger average buying power than any other mediums of publicity, and, as such, should have first consideration.

In discussing this subject Mr. Shuman says:

The advertising agent who asks you for a commission on a contract stultifies himself, or would if his province or functions were properly recognized, as much as does the physician who prescribes a medicine on which he receives a commission from a maker.

Advertising agencies justify themselves by stating the fact, and it is often a fact, that they create advertising, develop small advertisers into large ones, and shower money into the laps of publishers. They have done this and they have done more—they have created wealth for their advertisers as well as for the publishers by putting brains and salesmanship into the copy that they create. They have created wealth, they have done wonders for business, and they are entitled to even better rewards than they receive, but they collect from the wrong party.

Mr. Shuman, acting as agent for a large number of concerns, intends to make his clients pay the cost of advertising and pay him his fee for attending to their work. In that way he is in the best possible position to get the best results for them without any imputation attaching to his work that he is placing it in the papers that pay him a commission and keeping it out of papers that do not pay a commission.

When the many reputable men in the advertising agency business come to a full understanding of their position, they will in time do the same thing, and those who lack the ability and the reliability to control advertising from customers on this basis will find themselves without a business.

FOR HIGHWAY ENGINEERS.

Commissioner E. J. Watson of the South Carolina Department of Agriculture, Immigration and Commerce, is urging the creation of the office of State highway engineer and has found favor of the plan among county supervisors. In an interview at Columbia for the *Charleston News and Courier*, Commissioner Watson dwells upon the widespread public sentiment in his State for the improvement of public highways, enlarges upon the economic advantages, especially to the farmers, of good roads, and insists that the engineer is as necessary for a properly constructed system of public highways as he is for the construction of railroads. That point was elaborated in one of the articles in the October Good Roads Special of the MANUFACTURERS' RECORD, and another point patent to students of the reports from more than 500 counties in the South published in that issue was the fact that there are so few county engineers in the South. Where there are such offices much may be accomplished of permanent value. But just as the best kind of a system of roads for a State can be obtained only under State auspices, so the engineering problems

connected with such a system should be committed to a State highway engineer.

SECOND-CLASS MAIL RATES.

In the section of President Taft's first annual message to Congress dealing with the annual deficit in the Postoffice Department are suggestions which we believe were not fully considered in the making. They deal with the question of the rates of postage for daily newspapers and other periodicals which have been discussed by extremists in the Postoffice Department for several years. President Taft said:

The deficit every year in the Postoffice Department is largely caused by the low rate of postage of once cent a pound charged on second-class mail matter, which includes not only newspapers, but magazines and miscellaneous periodicals. The actual loss growing out of the transmission of this second-class mail matter at one cent a pound amounts to about \$63,000,000 a year. The average cost of the transportation of this matter is more than nine cents a pound.

It appears that the average distance over which newspapers are delivered to their customers is 291 miles, while the average haul of magazines is 1048, and of miscellaneous periodicals 1128 miles. Thus, the average haul of the magazine is three and one-half times, and that of the miscellaneous periodical nearly four times, the haul of the daily newspaper, yet all of them pay the same postage rate of one cent a pound. The statistics of 1907 show that second-class mail matter constituted 63.91 per cent. of the weight of all the mail, and yielded only 5.19 per cent. of the revenue.

The figures given are startling, and show the payment by the Government of an enormous subsidy to the newspapers, magazines and periodicals, and Congress may well consider whether radical steps should not be taken to reduce the deficit in the Postoffice Department caused by this discrepancy between the actual cost of transportation and the compensation exacted therefor.

A great saving might be made, amounting to much more than half of the loss, by imposing upon magazines and periodicals a higher rate of postage. They are much heavier than newspapers and contain a much higher proportion of advertising to reading matter, and the average distance of their transportation is three and a half times as great.

The total deficit for the last fiscal year in the Postoffice Department amounted to \$17,500,000. The branches of its business which it did at a loss were the second-class mail service, in which the loss, as already said, was \$63,000,000, and the free rural delivery, in which the loss was \$28,000,000. These losses were in part offset by the profits of the letter postage and other sources of income. It would seem wise to reduce the loss upon second-class mail matter, at least to the extent of preventing a deficit in the total operations of the postoffice.

When Congress comes to deal with this question it is likely to meet an obstacle in the word "deficit," meaning the difference between the expenditures and the income in the operations of the Postoffice Department. The theory seems to be that disbursements and receipts should balance in the Postoffice Department, whatever may be the expectation as to other Departments of the Government. Why should this be? Does the country regard disbursements on account of the military or naval service or on account of pensions something that should be returned in full measure, if not with interest, from pensioners or from the operations of the army and navy? Such disbursements are supposed to be for services that have been rendered or that are to be rendered to the people of the country. But what are such services, either from the material or from any other standpoint, compared with the services rendered in the circulation of newspapers and other periodicals? Why should that service be expected to pay for itself when the fighting service, distinctively uneconomic, if not actually destructive of values, is willingly paid for from other sources to the tune of about \$350-

600,000 a year, which no one thinks of calling a deficit?

Why should President Taft draw a distinction between newspapers and magazines and miscellaneous periodicals, unless subconsciously he recognizes the greater weight in party politics of the newspapers? He says that second-class mail matter constituted in 1907 nearly 64 per cent. of the weight of all the mail, but yielded only 5.19 per cent. of the revenue. Before drawing a distinction between newspapers and other periodicals he should have had the figures showing what portion of the weight of second-class mail was that of newspapers and what portion that of all other periodicals. He should have had the figures showing what portion of the first-class postage is directly traceable to the publication of periodicals other than newspapers as tending to balance the cost of their transportation at second-class rates.

He did not in this connection emphasize the fact that the "deficit" on account of free rural delivery, \$28,000,000, is nearly half as much as the "deficit" on account of second-class matter. But why would he abolish the free rural delivery service or even object to an increase in the annual "deficit" on that account as the service naturally expands?

Nor did President Taft dwell, as he should have dwelt, in discussing this question fairly, upon the enormous amount of money spent by the Postoffice Department in circulating the tons of printed matter, the thousands of bound volumes, some of them weighing as much as ten pounds each, the hundreds of thousands of pamphlets and the millions of leaflets and other literature issued by the several Departments of the General Government.

For instance, in the past fiscal year the Department of Agriculture alone ordered printed 1200 different publications containing a total of 42,263 printed pages, and aggregating 17,190,345 copies, and these did not include more than 10,000,000 copies of weather maps and other minor publications issued by weather bureau stations outside of Washington, or the printing and distribution by Congress of several million copies of publications contributed by the Department. When to the publications of the several Departments of the Government carried by the expenditures through the Postoffice Department are added the millions of documents franked by Senators, Representatives and others, especially during a political campaign, the "deficit" of \$63,000,000 on account of second-class mail shrinks into insignificance.

There is another point that should be borne in mind. Many of the publications of the Departments thus circulated at the expense of the people of the United States come into direct competition, not only with individual publishing business, but also with individual authorship. No reasonable mind can object to the principle of such distribution, however it might contend for discrimination in selecting the matter to be distributed. No reasonable mind can object to the privilege of newspapers and other periodicals having the advantage of receiving such publications as part of the basis of their work for general enlightenment. But only an unreasonable mind can regard as even the shadow of what President Taft calls a "subsidy to the newspapers, magazines and periodicals" the difference between the cost of carrying such publications through the mails and the

payments made by them for such service, even granting that there is either not some mismanagement in the administration of the Postoffice Department, or gouging of the Government by the transportation agencies that makes the average cost of transportation of second-class matter more than nine cents a pound.

Why is it that the Government pays for transportation more than twice as much per pound as the express companies charge to individual shippers? Certainly the railroads make a profit out of express shipments. Why, then, cannot the Government secure from the railroads for its vast volume of business as low rates as express companies pay? Why claim a deficit when the Government is paying such exorbitant rates for transportation? Is not President Taft befogging the issue when he suggests that newspapers and periodicals must not only help to pay for the free handling of the tens of millions of pieces of Government matter carried free by the Postoffice Department, but also bear the burden of sustaining the Postoffice Department in paying for transportation a much higher rate than express companies are charged by the same railroads?

No careful student of the situation is willing to deny that reforms in the administration of the mails are possible, but one does not have to be immediately interested as a publisher to perceive that the way to such reforms does not lie in placing upon newspapers and other periodicals the burden for which the Government's own publications are largely responsible, and few thinking individuals are willing to acknowledge that the Postoffice Department ought to be a moneymaker.

THE OLD RELIABLE.

After many years' preparation, Webster's New International Dictionary has just been issued, new from cover to cover. When the International of 1890 succeeded the Unabridged there was a notable expansion in the size and the quality of the publication, but that has been succeeded in the New International, and the advance is suggested in the 400 additional pages, making a total of 2700, with 6000 illustrations and 400,000 words and phrases as against the original 170,000. The volume was prepared under the general editorship of William T. Harris, long United States Commissioner of Education, assisted by F. Sturges Allen, in law; Hartley B. Alexander, in anthropology and ethnology; David Todd, in astronomy; Paul W. Carhart, in pronunciation and phonetics; Edward S. Sheldon and Leo Wiener, in etymology; Percy W. Long, in obsolete and dialect words; Alfred C. True, in agriculture; Arthur T. Hadley, in economics; W. B. Smith, in mathematics; Frederick Bedell, in electricity; Austin M. Patterson, in chemistry; Russell Sturgis, in architecture, fine arts and heraldry; Lewis R. Jones, in bacteriology; Charles L. Pollard, in botany, horticulture and forestry; W. G. Van Name, Wilfred H. Osgood and W. P. Hay, in zoology; Samuel M. Jackson, in ecclesiastical terms; Rev. William Turner, in Roman Catholic theology and history; Rollin D. Salisbury, in geology; Walter J. Travis, in golf; K. Asakawa, in Japanese words; Henry Farrington, in mechanics, civil engineering, mechanic arts and trades; Alfred O. Lee, in medicine; R. W. Raymond, in metallurgy; Cleveland Abbe, in meteorology; Edward S. Gaynor, in mineralogy; L. V. Pirsson, in petrology; Edward L. Nichols, in physics; Morris Jastrow, Jr., in semitics, and John L. Lowes and George L. Kittredge,

in synonyms. In getting the best in scholarship, convenience, authority and utility the basal principles observed in this New International were a fuller application of the historical method to the old words of the language, an enlargement of the vocabulary, representing the new coinage incident to the world's advance in science, art, literature, exploration, politics, and the addition of general information concerning things as well as words, making the dictionary not only linguistic, but in a certain sense encyclopedic, the aim through all being to preserve the lucidity, exactness and comprehensiveness characteristic of the Webster definitions, and to reinforce those qualities by a closer analysis, a more historic order and a more complete presentation. The New International is published by G. & C. Merriam Company, Springfield, Mass., and its cost is \$12.

IN RETROSPECT.

With its attendance in inverse ratio to pretensions, the thing has happened again. Delegates to the second meeting of the "Southern Commercial Congress" were appointed all right by at least six Southern Governors. But even in the appointment there must have been a feeling that most of the delegates would get no farther on their way to Washington than the columns of the local newspapers. For instance, in one State, where the list of delegates appointed would fill about three-quarters of a column of a newspaper, subsequent announcement was made that two names had been added to the list, one of a district attorney and the other of a court clerk, "both of whom will attend, whether any of the nearly 100 others appointed do or not." In another State, which had an equally long list and where it was expected that probably 75 of the delegates appointed would attend the Southern Commercial Congress and the Rivers and Harbors Congress, it was stated that "if any of those who have been appointed to one of these conventions expecting to attend desires also to be accredited to the other, proper credentials will be furnished them upon request made to the executive office." On December 1 the New Orleans Item said:

At least 3000 delegates will be in attendance at the Southern Commercial Congress.

This estimate was evidently based upon the number of delegates appointed in New Orleans alone. The Mayor of the city appointed 75 and one of the business bodies appointed 35. If appointments elsewhere in Louisiana had been made in like proportion and if the delegates had gone to Washington, they could have been accommodated in no hall in that city. Clinging to its original estimate, but modifying it, the New Orleans Item said, on December 6, that there were "more than 1000 delegates from every section of the Southern States" at the opening of the Congress.

But the nearer to Washington the smaller the attendance naturally became. The report at Charlotte, N. C., was that there were 500 delegates present. At Portsmouth, Va., a few miles farther north, there were "nearly" 500 delegates reported. At Washington itself, where there was opportunity for an actual count of heads, including as delegates even the leisure class there that drops in upon any "congress" or "parliament", the cautious statement was made:

Delegates are sitting in the Congress from every State in Dixie, and the representation of the Southwest and the Gulf States is unexpectedly large.

The Washington correspondent of the New Orleans Picayune, evidently having a regard for his reputation as a faithful chronicler of facts, estimated it this way:

Louisiana probably is the best represented of any State in the Union in Washington

tonight. With two exceptions all of her senators and representatives are here, and there are nearly 50 delegates, headed by Governor Jared Y. Sanders and Mayor Martin Behrman, present to participate in the sessions of the Commercial Congress and the National Rivers and Harbors Congress.

"And the National Rivers and Harbors Congress." Exactly. And how many "delegates" to the "Southern Commercial Congress" would have taken the trip to Washington had it not been for the National Rivers and Harbors Congress, which is an established, practical, representative business proposition?

This question must be kept in mind in reading the statement in the Washington special to the Baltimore Sun to the effect that 300 or more delegates attended the Southern Commercial Congress. Three hundred probably sized up the number of the crowd that was present and, if there were among it more than a score of men identified with practical work for Southern development, they kept mighty quiet.

Some good new speeches were made, like those of Hon. George W. Koerner, commissioner of agriculture and immigration of Virginia, and Hugh MacRae of Wilmington, N. C., men who are actually doing things in Southern development. But the headline of a North Carolina paper epitomized most of the speeches correctly in the phrase:

A number of interesting things, several of them, however, not altogether new, said by distinguished speakers.

If anything new had been said, if anything likely to attract the attention of the rest of the world to the South had been said, what was the use? For answer consult the columns of leading newspapers of the country outside the South and see how much space was not given to the Congress?

Some of our Southern contemporaries were astray; for, they published the Associated Press statement that "the meeting is the first annual affair of its kind", when as a matter of fact it was the second meeting of the "Congress" itself and about the sixth of its kind within the past 10 years.

MITCHELL COKE OVEN.

John Fulton, the well-known mining engineer, for many years one of the foremost authorities of the country on coke, writing under date of December 8 from Johnstown, Pa., to the MANUFACTURERS' RECORD, says:

"I enclose you a couple of copies of the 'Mitchell Patent Coke Oven.' This is the coming oven, as it reduces the terrible manual labor in the old-time beehive coke oven. It further reduces or removes the manual labor in the manufacture of coke."

The Mitchell oven was described fully in a recent issue of the MANUFACTURERS' RECORD. The pamphlet entitled "Mitchell Patent Coke Oven," to which Mr. Fulton refers, is an elaborate technical description of this oven written by Mr. Fulton for *Mines and Minerals* and republished in pamphlet form.

MUSKOGEE.

The Commercial Club of Muskogee, Okla., is circulating a folder showing that since 1898 the population has increased from 4233 to 28,000; that the city owns water-works costing \$550,000, a storm-sewer system costing \$327,000 and a sanitary-sewer system costing \$150,000. There are 25 miles of streets, principally asphalt, and 90 miles of concrete sidewalks. Public improvements representing \$2,000,000 are under way. Muskogee is in the natural-gas field, and obtains natural gas for domestic use at 25 cents per 1000 cubic feet, and for industrial use at from five to seven cents per 1000 cubic feet.

It is estimated that the coal output in Alabama this year will reach 13,000,000 tons.

A YOUNG TEXAN CITY.

Coleman and Its Nearby Agriculture and Mineral Wealth.

[Special Cor. Manufacturers' Record.]

Coleman, Tex., December 10.

Situated on the Gulf, Colorado & Santa Fe Railroad, which runs from Temple to San Angelo, just south of latitude 32, and in what is known as central west Texas; about 150 miles due west of Waco and about the same distance from Fort Worth; upon a high plateau nearly 1800 feet above tidewater, stands this little city of about 5000 keen, progressive people.

Coleman is the county-seat of the county of the same name, and both county and city are among the youngest in the State. This is right in the midst of perhaps the best portion of what once was the finest, grazing section of Texas, but is now considered a part of the best agricultural portion of the State. For the most part it is a rolling prairie, but contains considerable scrubby timber, which has up to the present answered every purpose for fuel and fenceposts. Most of the lands of the county are a loamy chocolate, and very productive. Most every crop common to the temperate zone grows here and yields fully up to the average of the best lands of this State. With only about 20 per cent. of the tillable lands of the county in cultivation, it is claimed that 64,000 bales of cotton were produced there last year. In addition to that crop, 350 cars of small grain was shipped from Coleman last season. Corn, wheat, oats, kaffir corn and milo maize all do well here.

The price of land varies from \$10 to \$25 per acre for unimproved, and \$15 to \$50 per acre for improved, according to location and improvements.

It is also found that all kinds of fruits do well here. Apples appear to be especially adapted to the soils and climate, and grow to unusual size and of excellent flavor.

Vegetables appear to thrive here, and with improved railroad facilities—which

being peculiarly adapted to the tree. But in addition there are quite a large number of the cultivated pecans grown in the county. Of the latter many of the best-known varieties are grown, and some of these sell readily at \$1 a pound for seed purposes. It is said that an average crop of these nuts brings as much as \$100,000.

Stock-raising is another important industry, not only in this, but in all adjoining counties. According to the latest report of the tax assessor of the county, there were 34,295 cattle, 24,798 sheep and 13,252 horses and mules in the county, while the total valuation of all stock was \$1,238,330. But it must not be supposed

Dallas, Cleburne & Coleman lines. Each of these new roads will be very important feeders for Coleman, and will tend to broaden her field of commercial importance. The first of the three named will furnish direct communication with the Pacific coast country and lessen the distance some 200 or 300 miles of what it is now. The second will put Coleman in direct communication with the Llano iron-ore field, bringing that important section in touch with both the Coleman and McCulloch counties coal fields, while the third road will bring Coleman more than 100 miles nearer the Fort Worth packing-houses and the Dallas wholesale houses. With these roads all in operation Coleman must assume an important position among her sister towns of this section of the State.

A very fine grade of brown coal or lignite is now being mined in several places in the country. Steps have already been taken looking to the development of these mines on much larger scale, and every indication now points to this becoming one of the big coal-producing counties of Texas in the near future. There is good reason to support this supposition. It is found that between 15,000 and 20,000 acres of coal lands lie in Coleman county alone, to say nothing of what there may be in other adjoining counties. There is also large deposits of a glass sand, which has been found to assay 99 per cent. pure silica, and with an abundance of cheap fuel there should be no difficulty in interesting practical men of means to turn this into a marketable commodity. There are also large beds of shale, from which vitrified brick may be made. A good quality of fire-brick clay is also found here. It is claimed that the Llano iron ores extends up into this county. Of this I am not definitely informed, however, and lead and zinc are among the minerals claimed to exist in the county. Coleman county is also said to be in the oil belt of Central Texas. Wells dug for water in some parts of the county are said to be producing small quantities of a heavy oil similar to that obtained from the Corsicana oil field, and it is thought possible, and indeed probable, that this may yet develop a fine oil field.

Coleman has two national and one State bank, with aggregate resources of \$401,853 and deposits of \$561,600.

The assessed value of all properties of the county is \$12,259,645, and of the city \$1,920,000, and the rate of taxation in the city is only 55 cents on the \$100. Coleman has only \$50,000 outstanding bonded indebtedness, which was issued for building schoolhouse, which is shown in the accompanying illustration.

Most all religious denominations have handsome churches in Coleman, and the moral, social, as well as the intellectual standard of citizenship will compare favorably with any town of its size in Texas.

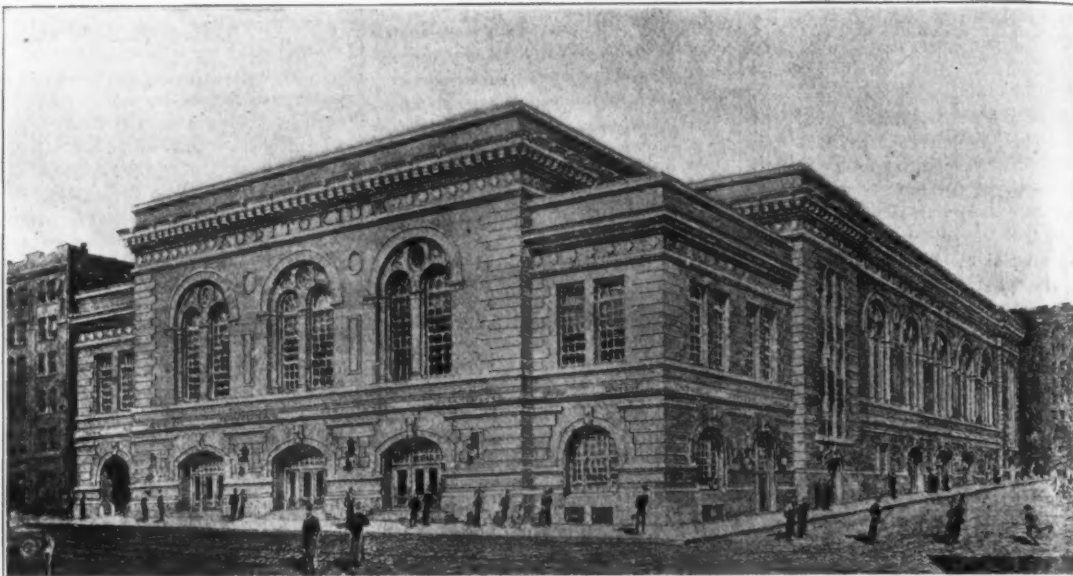
Much building is in evidence in Coleman, among which is the Farmers' State Bank and the New Florence Hotel, both to be handsome as well as up-to-date buildings in their lines.

Coleman has a progressive Commercial Club, of which Mr. W. E. La Fon is secretary, who will be found active in the work of upbuilding his very attractive little city. There are many openings here for the investment of capital, and especially is this the case with reference to certain manufacturing enterprises. The simple fact that this is a comparatively new section, and yet is a thrifty, growing section, makes it certainly, with all that nature has done for it in the way of natural resources, a very promising point for business and residence as well. Texas has hundreds of live, progressive towns where the man of means and enterprise can "get a foothold," and if he has metal can make his mark in the world—and Coleman is one of them.

Wm. C. CLOYD.

The Building Material Men's Exchange of Jefferson county, Alabama, with headquarters in the Chamber of Commerce, Birmingham, has as officers: President, H. H. Snell, Lathrop Lumber Co.; first vice-president, W. A. Currie, Moore & Handley Hardware Co.; second vice-president, L. L. Stephenson of Jefferson Brick Supply Co.; treasurer, J. H. Eddy, Kaul Lumber Co.; secretary, Thomas S. Forbes; governors, Frank T. Richardson, Birmingham Paint & Glass Co.; Gus Colvin, Alabama Supply Co., and W. W. Snead, Carolina Portland Cement Co.

The Virginia State Horticultural Society will meet at Winchester January 5 and 6, when it is expected that apples will constitute a striking feature of the exhibits.



The Houston Auditorium.

This is an illustration of the building to be erected at Houston for public auditorium and several municipal departments; 150x250 feet; fireproof; Texas granite, gray pressed brick and terra-cotta; seating capacity, 7000; space provided for large pipe organ; architects, Mauran & Russell of St. Louis and Houston.



COLEMAN HIGH SCHOOL.

Coleman is now getting—a great impetus will be given this particular industry. Watermelons grown here are found to equal those of the most favored localities of this or any other State in the Southwest. Cantaloupes are another profitable crop, while tomatoes are already a source of large income to the truck-growers. Some idea of the importance of the melon crop of this locality may be gathered from a statement to the effect that one dealer alone, Mr. H. A. Halbert of this city, handled this year 2000 pounds of melon seed from one of the leading seed houses of the Northwest. Another important crop of Coleman county is pecans. Along the creek bottoms the wild pecans grow, this

that the old longhorns constitute any part in this showing. Either thoroughbreds or high-graded cattle and also better breeds of horses and mules, some being registered stock, constitute the class of all stock raised here. This also applies to the sheep of this section. By the way, the sheep of this county are a very important money crop, as the clip of this year is said to have sold for \$500,000.

I have mentioned only the Santa Fe Railroad as the only railroad at Coleman, but I desire to say further that there are three other roads either now building or to be begun in the near future. These are the Coleman-Texico cut-off, now building; the Coleman-Llano & Southern, and the

Bonds for River and Harbor Improvements.

[Special Correspondence Manufacturers' Record.]

Washington, D. C., December 13.

The determination of the National Rivers and Harbors Congress to stand squarely behind the bond-issue idea for the improvement of the country's waterways was strikingly emphasized throughout the three days' proceedings of the sixth annual convention held here last week. Every speaker advocated the issuance of bonds as the only method whereby the work could be undertaken on a broad, liberal and comprehensive plan and carried to completion with proper rapidity.

President Taft, who made the opening address, reiterated his approval of the bond-issue idea, pointing out that as private corporations issue bonds to expedite the completion of their projects, it seems wise that the Government also do the same to accomplish results desired. During the course of his remarks President Taft made the following suggestion:

"You are going to encounter in Congress great opposition to the policy of issuing bonds right out of hand. You are much more likely to get from Congress a declaration of policy in the shape of a declaration that a certain improvement ought to be carried out and spread upon the minutes of Congress in the form of a resolution or a declaration in a statute. Now, what I advise you to do is to get that declaration. Then, when the time comes that political exigency shall prevent the appropriation of sufficient funds from the current revenues to put the proper part of the project through the coming year or the coming two years as economy requires, then the question of issuing bonds will arise. I would get the declaration first, and not have the bond first, for the reason that you will encounter the objection by Congress that the issuing of bonds and the receipt of the money will develop a desire to be extravagant. That may not meet your views, but I have thought it over, and I know something about Congress.

"I know where you are going to encounter opposition, and I believe the best way is the natural way with those gentlemen. You lead them on to declare in favor of the Missouri improvement, in favor of the St. Louis to St. Paul improvement, in favor of the Cairo to St. Louis improvement, in favor of the Ohio improvement, all of which have been approved by the army engineers, and get them recorded in the statutes of this country as declaring that those things are to be carried out and let them make their first appropriation from the revenues of the country, and then you have them where they must issue bonds, unless the revenues afford a sufficient amount each year to carry that project on economically and with due rapidity."

By some of those attending, as well as by some of the newspapers, these remarks were interpreted as voicing disapproval of the bond issue. Those, however, who studied and analyzed the suggestions offered have interpreted them as meaning but one thing—commit the National Congress to a plan favoring the broad development of the country's waterways within a reasonable time, and as the current revenue of the Government will be insufficient to carry out such a plan, a bond issue must per se become a necessity. Moreover, to a delegation of 500 members of the Ohio Valley Improvement Association, who called on him, President Taft stated that he had been misunderstood in his allusion to the bond-issue plan, and

emphatically pointed out that he did favor this method of providing funds, but had merely outlined what seemed to him the best plan by which to obtain them.

In his annual report President Joseph E. Ransdell stated that much had been accomplished by the Congress, but that a great deal of work was yet to be done, and the fight must be carried on with unrelaxed energy. He strongly urged an annual appropriation of \$50,000,000 secured by a bond issue and to be used when the current revenues of the Government will not suffice, and pointed out the following reasons justifying a bond issue: Bond issue only method to insure permanent and continuous carrying to completion waterways project; a permanent investment, and not a current expense; no great enterprise of permanent character is constructed without a bond issue; are issuing over \$375,000,000 bonds for Panama Canal, and improvements of rivers and harbors are more important and necessary to more people of the country; most current revenues are needed for current expenses, and cannot, therefore, supply the amount needed for proper waterways development; wiser to have general bond issues, so as to let Congress appropriate money to complete projects in 10 years.

President Ransdell also advocated the construction of suitable terminals for general use on all waterways, and deprecated as eminently unfit for any corporation to monopolize a water-front and keep out all others. To offset this, he urged that the public resume title by right of eminent domain, and that Congress should insist that the State and city to be benefited must require and hold for general use sufficient public terminal facilities.

As usual, the program provided for addresses by representative men in National and State affairs, and in all lines of manufacture, commerce, mercantile, agriculture, etc., so that it may be said that the opinions of the entire business interests of the country were registered through the speakers.

This association represents in its membership and in its annual gatherings more of the leading diversified interests of the country than does any other. There is practically no class of business in the country that is not included in its membership by its representative leaders.

The officers of the association are particularly anxious to be assured of sufficient income annually that will enable them to carry out their ideas for still further broadening knowledge concerning the necessity for waterway improvements. They cannot, however, do this without having definite assurance that the necessary money will be forthcoming during the year. If this money could be assured, the work of arousing interest on a much broader scale could be undertaken; permanent headquarters could be established at Washington from which to direct the campaign, and consequently much good accomplished. This kind of work, however, cannot be done when the income of the association is so uncertain.

President Ransdell for many years has been untiring in his efforts for the improvement of the country's waterways, and it has no doubt been due to his persistency and splendid work that this question has assumed the important place it occupies today in the affairs of the country. President Ransdell has been ably backed up by the various gentlemen who from time to time have served as executive officers and directors of the association, and if others throughout the country, especially those who will derive direct benefit from the

improvement of waterways, would take a more substantial interest in the efforts to secure action on their improvement, results would be accomplished much more quickly and effectively.

This was the largest attended convention that has yet been held, there being over 3000 registered delegates coming from all parts of the country; indeed, the attendance has steadily increased year by year, which in itself is indicative of the increasing interest being shown in waterways improvement throughout the land, an interest which the officers of the association intend to keep thriving and spreading until the National Congress recognizes the demands of the Rivers and Harbors Congress as being the demands of the people.

Feeling that the time had come when something must be done by the National Congress for the country's waterways, the association is particularly anxious to secure definite action during the present session of Congress. With this idea in mind they adopted unanimously the following statement, which was presented by special committee representing the association to President Taft, Vice-President Sherman, Speaker Cannon and the chairman of the House Committee on Rivers and Harbors:

"The National Rivers and Harbors Congress includes in this convention 3150 accredited delegates—farmers, manufacturers, merchants, maritime and professional men and members of commercial bodies, representing the greater part of the tonnage of the United States, as well as the shipping interests of the country at large.

"This Congress is assembled to urge upon the Government of the United States the immediate adoption of a broad, liberal, comprehensive and effective policy of rivers and harbors improvements, with profound conviction of its responsibility, and earnestly requests the attention of the President of the United States and the Senate and the House of Representatives of the National Congress to the matters herein set forth.

"Every commercial country in the world is working to better its transportation methods, knowing that upon easy, cheap and sufficient transportation depends the material prosperity of its people, and knowing that to the country which first perfects its system of transportation will come the commercial supremacy of the world.

"Every foreign country is utilizing its rivers and harbors and other waterways as the chief factors in perfecting its system of transportation, and the Government of every foreign commercial country has deliberately assumed the responsibility of making its rivers and harbors and other waterways adequate for all transportation purposes.

"The United States, with resources and courage great enough to undertake successfully the building of that gigantic and most useful water highway, the Panama Canal, controlling its own navigable waterways to the exclusion of private effort, is alone among the world-powers in neglecting the improvement of its waterways, and has so failed to develop them into effective freight-carrying navigability that the inadequate transportation facilities now seriously impair our commercial growth and cause enormous waste of our agricultural resources, retarding the settlement of the country and hindering its productive development.

"Unless these transportation facilities be made sufficient the United States cannot hope either to increase its domestic commerce or extend its foreign commerce as it should, or to take advantage of the opening of the Panama Canal in order to compete with other commercial countries in the markets of the world. This Gov-

ernment has the power to give the United States absolute commercial supremacy over all other countries, and the Sixty-first Congress, now in session, can do much to accomplish this by appropriate legislation.

"A rivers and harbors bill should be passed as early as possible in the present session of this Congress, appropriating at least \$50,000,000 for the purpose of carrying forward, under the continuing contract system, such rivers and harbors projects as have been heretofore entered on or finally approved, and as are of such a character as to surely fit into and carry into effective use any larger, comprehensive and connected waterway system that may be subsequently adopted, and annually for 10 years hereafter an equal sum should be appropriated, and we believe that the annual rivers and harbors bill should be placed upon an equal footing with the other great appropriation bills, and we condemn the present method of appropriation, whereby the rivers and harbors bills carries only such sum as may remain after the other budgets have been authorized.

"All projects approved by the Government engineers and adopted by Congress should be put upon the continuing contract system, and moneys provided for their completion as rapidly as physical conditions permit, such moneys to be paid from current revenues when practicable or from an issuance of bonds when necessary.

"To secure the development of our rivers and harbors on a comprehensive and systematic plan a department of public works, with a cabinet officer at its head, should be created, which department should have charge of and control over all public works of this and of a similar character. This need in no way prevent the use of the United States Corps of Engineers now having charge of rivers and harbors work. This corps is now manifestly insufficient for the work they are called upon to do, and we urge that it be sufficiently increased, utilizing in the permanent organization so far as is practicable the United States Assistant Civil Engineers now in the employ of the Government. We endorse the bill now pending before Congress for the increase of this corps of engineers, and urge its enactment into law. We believe that this corps of engineers should be given authority, and it should be made its duty to formulate and suggest to Congress plans and projects for rivers and harbors improvement.

"In order to fully secure the benefits of waterway improvement to the shippers of the country, it is absolutely necessary that the harbors, lakes and rivers should have the most modern terminal systems for the vessels. We earnestly urge upon the people of States and cities, where waterway improvement is proceeding, the importance of establishing public terminals and landing places with the most modern appliances and equipment for loading and unloading freight and of beginning with work immediately.

"Actuated by the desire to see the United States become the chief commercial country of the world, we, the delegates to this National Rivers and Harbors Congress, present this statement of the transportation conditions now existing, and the remedy we propose, for the consideration of the President of the United States and of the National Congress, and on behalf of the people of our country, we urge the adoption of these recommendations."

The following officers and directors were elected for the ensuing year:

President—Joseph E. Ransdell; secre-

tary and treasurer, J. F. Ellison; special director, John A. Fox.

Directors by sections:

Atlantic Seaboard—William H. Lincoln, Boston, Mass.; Olin J. Stephens, New York; George E. Bartol, Philadelphia; J. Hampton Moore, Philadelphia; H. C. Warren, New Haven, Conn.; John R. Sherwood, Baltimore, Md.; Anthony Higgins, Wilmington, Del.

South Atlantic Seaboard—E. J. Hale, Fayetteville, N. C.; W. S. Reamer, Columbia, S. C.; John C. Freeman, Richmond, Va.; D. U. Fletcher, Jacksonville, Fla.; Howard Stafford, Augusta, Ga.; E. Lommus, Columbus, Ga.

Gulf Seaboard—Martin Behrman, New Orleans; S. Taliaferro, Houston, Tex.; H. Pillans, Mobile, Ala.; Roy Miller, Corpus Christi, Tex.; R. L. Simpson, Gulfport, Miss.

Entire Mississippi Valley District—Thos. Wilkinson, Burlington, Iowa; W. P. Kennett, St. Louis, Mo.; Eli Warren, St. Paul, Minn.; W. K. Kavanaugh, St. Louis, Mo.; Chas. Scott, Rosedale, Miss.

The Great Lakes District—Edward H. Butler, Buffalo, N. Y.; James H. Davidson, Oshkosh, Wis.; E. W. Wickey, East Chicago, Ind.; T. Edward Wilder, Chicago, Ill.; H. I. Shephard, Toledo, O.; Alex. McDougal, Duluth, Minn.; P. W. Cullinan, Oswego, N. Y.

Ohio Valley District—W. B. Rodgers, Pittsburg, Pa.; Albert Bettinger, Cincinnati, O.; John L. Vance, Columbus, O.; Henry Riesenbergh, Indianapolis, Ind.; George H. Parsons, Cairo, Ill.

Tennessee and Cumberland District—M. T. Bryan, Nashville, Tenn.; J. A. Patten, Chattanooga, Tenn.

Arkansas Valley District—John A. Fox, Arkansas.

Missouri Valley District—Lawrence M. Jones, Kansas City, Mo.; I. P. Baker, Bismarck, N. D.

Pacific Coast District—A. H. Devers, Portland, Ore.; George C. Pardee, Oakland, Cal.; Dr. N. G. Blalock, Walla Walla, Wash.

WM. H. STONE.

TULSA'S GOOD ROADS.

A Beginning of Improvements in Eastern Oklahoma.

[Special Cor. Manufacturers' Record.]

Tulsa, Okla., December 9.

To demonstrate that the Indian Territory portion of the State of Oklahoma is in primitive condition with respect to roads, it is only necessary to drive over any part of it. Only a few days since the writer, through the courtesy of Mr. J. P. Harter, chairman of the County Good Roads Association, was given the opportunity to tour a portion of the country immediately contiguous to the city of Tulsa. While it was not his expectation to see good roads, he was agreeably surprised to find passable highways opened up to an extent sufficient to enable the farmers generally to reach the city market. Tulsa county has already taken the initiative in the matter of good roads, and within the shortest possible time it can be considered certain that this county will be provided with roads equal to those of any of the older States.

The total valuation of property in Tulsa county under the assessment of 1909 is \$30,000,000, and upon this basis the county at a recent election voted to issue \$700,000 of bonds, to be applied as follows: For roads, \$400,000; for bridges, \$75,000; for courthouse, \$200,000; for jail, \$25,000. The road fund is to be distributed to the several townships, or road districts, in proportion to the necessities of each, the State law requiring that each township or district shall put up, in addition, 75 per cent. of the amount asked for. This will give the county as a whole \$700,

000 for road purposes alone, an amount sufficient to assure roads par excellence to possibly the fullest demand.

Preliminary to the utilizing of the fund provided by the bond issue a largely attended meeting of the farmers of the several townships of the county was held at the Commercial Club rooms, in this city, on Saturday, the 4th inst. At this meeting a good roads association was organized. The officers elected were chosen especially with a view to their qualifications and well-known personal interest in good roads. At the meeting were present practical road builders from several of the older States, and after the routine work of organization the good-roads question was discussed in many of its different phases, and in this connection it may not be inappropriate to say that the texts for some of the ablest talks were taken from the articles printed in the recent "good-roads" edition of the MANUFACTURERS' RECORD. In the line of his duty as a correspondent, it has been the fortune of the writer to attend many good-roads conventions. While during these meetings it was his pleasure to listen to much splendid oratory and many sensible suggestions, he can truthfully say that he imbibed more practical ideas as to road-building, the preservation of roads, together with their profitable utilization, from the talks made in the Tulsa meeting than from all other sources.

Considering that Tulsa, now a city of fully 20,000 population, metropolitan in every respect, possessed of every modern public utility, is practically only six years old, and that even after its birth titles to the lands within the county were held by the Indians, the increase in values seems almost astounding. Taking the past six years as a criterion, it will not require much of a stretch of imagination to predict that within the next six years Tulsa will be not only, possibly, the metropolis of the State, but Tulsa county the leading one of Oklahoma. The county has oil, gas and coal in superabundance, together with stone, shale, sand, timber and water galore, with a soil unsurpassed for diversified agriculture.

With reference to the city of Tulsa it can truthfully be said she has no parallel of her age in the world. At practically six years of age she has a population of 20,000, miles upon miles of asphalt streets and granitoid sidewalks, with other miles and miles of both in construction or under contract. She has block after block of business structures, many of them skyscrapers, all of them modern, and what is better, none of them vacant. Her residence districts are covered with modern homes, some of them palatial and most of them occupied by their owners. The only drawback to the progress of the city is in the fact that residences, seemingly, cannot be erected rapidly enough to keep pace with the demand. She is already a jobbing center of very considerable moment, with a rapidly-increasing trade, while in manufactures, if indications count for anything, she will in a very few years rank as one of the great manufacturing cities of the Southwest. With respect to encouraging the establishing of manufacturers an industrial association has recently been chartered under the State law by Tulsa capitalists, with ample capital, the object being to purchase lands with the view to offering free sites to manufacturers. Her educational facilities are A1, while in religion all of the orthodox denominations are represented, each congregation occupying a splendid edifice of its own. Socially, no city in the United States affords a better grade of society.

Tulsa has five railways, three of them, the Atchison, Topeka & Santa Fe, the Missouri, Kansas & Texas and the Frisco

trunk lines, the other two local, the Midland Valley, extending from Fort Smith, Ark., to Arkansas City, Kans.; the Arkansas Valley & Western reaching from Tulsa to Enid, Okla. She has a splendidly-equipped trolley line connecting Henry Kendall College with the city and affording quick intercourse with all parts of the city. She also has an interurban line under construction and partly completed, connecting her with Sapulpa.

In this communication your correspondent has said much touching the city of Tulsa and Tulsa county, but in nothing has he exaggerated. In no instance has he drawn upon his imagination. In truth, he might have said much additional, placing the city and county in even a more favorable light. He knew Chicago when she numbered less than 20,000 people, St. Louis when she had only 40,000 and Kansas City before she had a name, and he can truthfully say that neither of those places was possessed of the natural resources that Tulsa is blessed with.

F. M. POSEGATE.

GROWTH AT VICTORIA.

Changes Wrought in the Past Few Years in Lower Texas.

[Special Cor. Manufacturers' Record.]

Victoria, Tex., December 11.

Centrally located in the wonderfully fertile Gulf coast county of Texas, into which a steady stream of immigration is now pouring, Victoria, one of the most progressive cities of lower Texas, is more than keeping pace with the development of the surrounding country. Although one of the oldest Texas towns, the growth until a few years ago was slow. Situated in one of the most important grazing sections of the State, little attention was given to commercial upbuilding until grazing land began to be gradually used for agricultural purposes, and the development of cotton, rice, sugar-cane, tobacco and other commodities brought a more thorough utilization of the fertile soil.

Victoria is one of the larger inland cities of the Gulf coast region. At present it has a population of 10,000, with all modern conveniences. Among the municipal utilities are an up-to-date electric-lighting system, water-works and a sewerage system which thoroughly covers the city. Victoria county, of which Victoria is the seat, is one of the best cotton-producing sections to be found along the coast, and here are located three cotton gins and a large cotton-oil mill, taking care of a large part of the cotton production of contiguous territory. These enterprises are of comparatively recent beginning. Among other industries are a sash and door factory, utilizing the valuable timber resources, which are of easy access; a cigar factory, ice plant and bottling works. Three banks, with a total capitalization of \$600,000 and deposits of over \$1,250,000, reflect the commercial importance of the city. Residences show some of the finest types of architecture, and some of the business blocks would reflect credit to a city many times as large as Victoria.

One of the industries of which the city has long been in need, and which will shortly be established, is a sugar factory. With the rapid growth of sugar-cane cultivation this city has become one of the best points in the State for the location of an industry of this kind. Local capitalists have made arrangements for the erection of a sugar factory of large capacity, and its establishment will be a matter of only a few months. The erection of a Federal building, to cost \$80,000, will be started at an early date. Appropriations have been made and a site selected. In the business district a number of new structures are going up, and others are planned, among which is a five-story brick

office building. Mr. C. E. Holland, one of the most progressive citizens of the city, is backing this undertaking.

In the matter of transportation Victoria commands a position which will ultimately make it an extensive jobbing center. The Galveston, Harrisburg & San Antonio Railway maintains a division here and operates a number of trains each way daily between Houston and San Antonio, connections being made in those cities with transcontinental trunk lines. In addition, Victoria has excellent service to the following terminals: Cuero, Port Lavaca, Palacios and Beeville. Completion of the Port O'Connor, Rio Grande & Northern Railroad will further add to the importance of the city as a railroad center.

A new factor in the transportation problem which will be of much importance to Victoria is the opening of the Guadalupe River for transportation. The clearing and dredging of this river is now being carried on through Government appropriations, and within a few months this city will enjoy water transportation and consequent cheap rates, which will give a further impetus to development forces. At present about half of the dredging has been completed, and early next year the river will be open for navigation between Victoria and San Antonio Bay.

As soon as water transportation becomes a reality the newly organized Victoria Navigation Co. will install a line of steamers to ply between this point and Corpus Christi and Galveston. Steamers have been purchased and barges constructed so that there may be no lapse of time between the completion of the Government work and application of a water rate on transportation. With the realization of this undertaking it will be possible to make direct shipments to Victoria and points along the lower Guadalupe from all seaboard points at a much lower rate than now prevails.

Taking into consideration its central location, with competing rail and water transportation, surrounded by a country which produces an endless variety of crops which are peculiar to this region, Victoria is in a fair way to become one of the commercial centers of the Gulf coast country. Extensive forests of hardwoods have hardly been touched, and await development forces. Spanish moss covers the forest growth in great profusion, and here, as at many other points where it is now being utilized, it may be profitably converted into mattresses, horse blankets, collars, etc. The rapid development of broom-corn culture has created a demand for a new industry, and a broom factory is now contemplated. The growth of the truck farming industry warrants a canning factory, and steps are now being taken for the establishment of a plant of this kind. In fact, the field is inviting for the investment of capital in many lines of manufacturing, and the Victoria Business Men's League is entering upon an active campaign in putting the facts before the public.

W. S. HUDSON.

The Vogemann Line has begun a regular steamship service between New Orleans, Rotterdam and Hamburg, the first steamer to leave New Orleans being the Vogesen, with a full cargo. She is a vessel of 3600 gross tons, and is 350 feet long. Other steamers are to be placed on the route as soon as they are constructed.

In order that the drainage work in North Carolina shall be carried on with some degree of uniformity, Dr. Joseph Hyde Pratt, State Geologist, has drawn up and recommended to the engineer and viewers a series of instructions to be followed in making surveys and reports of public drainage districts in the State.

The Need of Increased Production of Cotton.

By R. L. McKELLAR of Louisville, Assistant Freight Traffic Manager, Southern Railway.

[Written for the Manufacturers' Record.]

The total cotton crop for the current year, ending August 31, 1910, is estimated around 11,000,000 bales, and with the season only three months advanced the cotton mills are beginning to shut down, or curtail their running time, for lack of raw cotton, although it has only been within the last four years that a crop of 11,000,000 bales has been much exceeded. This presents a very remarkable and interesting condition, and one that is worthy of thoughtful consideration by everyone who is interested in the production and transportation of cotton and its products.

While it may be argued that the inability of the mills to secure cotton is by reason of what is termed an abnormally high price, nevertheless a reasonably ready market is being found for all of the cotton that is offered at the current prices, which goes to show that the world's consumption of raw cotton is increasing more rapidly than is its production.

The total production of cotton in the United States, and the value of the total crop for the last 15 years, has been as follows:

Year.	Bales.	Value.
1895-96.....	7,157,346	\$294,095,347
1896-97.....	8,757,964	321,921,834
1897-98.....	11,199,394	320,552,096
1898-99.....	11,274,840	282,772,987
1899-1900.....	9,436,416	363,784,820
1900-01.....	10,383,422	494,567,549
1901-02.....	10,680,680	438,014,689
1902-03.....	10,727,559	460,770,282
1903-04.....	10,011,374	617,501,548
1904-05.....	13,563,885	628,195,359
1905-06.....	11,245,988	641,720,435
1906-07.....	13,513,982	716,352,265
1907-08.....	11,571,966	672,285,093
1908-09.....	13,925,547	683,794,094

This table shows that in 1895-96, with a crop of approximately 7,000,000 bales, the average per bale was \$41, and in 1908-1909, with a crop of 14,000,000 bales, the average was \$50 per bale, and in 1909-1910, with an estimated crop of around 11,000,000 bales, it is averaging \$75 per bale.

At the present market price the value of the current year's crop, estimated at 11,000,000 bales, will amount to approximately \$825,000,000, which is \$142,000,000 greater than last year and \$109,000,000 in excess of any previous crop.

Cottonseed is now selling for approximately \$30 per ton, an advance of fully 50 per cent. above normal, which means that the total value of this year's crop of cottonseed is greater than that of any previous year by something like \$75,000,000.

There is no crop that furnishes a more diversified tonnage to the carriers or a more diversified trade to merchants and manufacturers than cotton. In the first place, practically every bale of cotton is transported for a more or less distance, and when manufactured in Southern territory its products afford high-class traffic requiring further transportation, and representing an immense trade value. Its seed furnishes a still greater tonnage; for example, for every bale of cotton there is produced a half-ton of seed. These seed, or the most of them, are now a transporting commodity, and a still further tonnage is produced by its by-products of cottonseed meal, cake, oil and lard compound. Then comes fertilizer, fertilizer material, bagging and ties, which constitute an additional heavy tonnage and an immense trade to dealers.

Furthermore, cotton, cottonseed and the by-products named constitute commodities readily convertible into cash, which is, in turn, reinvested in transportable merchandise, and it is also a fact that where cotton is the principal or leading product the supplies necessary to its production, such as fertilizer, implements, vehicles, seed,

stock and other necessities, including a portion of the food supply of the laborers and their animals, affords the carriers a very large additional tonnage and at the same time affords an immense trade to merchants dealing in these various commodities.

The object is to point out that cotton and its by-products, together with its collateral and cumulative interests, is probably the largest transportable tonnage-producing crop that is grown, and also one of the most remunerative. At anything like the present market price of 15 cents per pound for cotton and \$30 per ton for cottonseed, it is also a very remunerative crop to the producer, and also one that is becoming more valuable each year by reason of the world's increased consumption as a result of the increased uses that are being made of cotton. In view of these facts and conditions, the present is a most opportune time for the carriers and other kindred interests, such as fertilizer manufacturers, bagging and tie manufacturers, gin and machinery manufacturers and compress operators, to promote a discussion of existing conditions, having for its object an increased production of cotton, not necessarily by an increased acreage, but by a more general use of fertilizer, along with the employment of more scientific methods in the production and marketing of cotton, and also to stimulate interest in establishing experimental farms and reclaiming impoverished and abandoned cotton lands; or, in other words, encourage the production of more cotton and better cotton on the same area. Where land is now producing a bale to two acres, reduce the cost per bale by making it produce a bale to the acre, and ultimately two bales to the acre. The South is now in most excellent condition to inaugurate intensive farming by reason of its generous returns from this year's cotton crop and its immense corn crop, which shows in comparison with last year as follows:

	1909.	1908.
Alabama.....	43,646,000	44,825,000
Arkansas.....	52,002,000	54,035,000
Georgia.....	62,161,000	53,750,000
Kentucky.....	103,472,000	84,823,000
Louisiana.....	51,198,000	33,898,000
Mississippi.....	41,499,000	45,845,000
North Carolina.....	48,686,000	50,166,000
South Carolina.....	37,041,000	29,229,000
Tennessee.....	75,174,000	82,080,000
Texas.....	117,107,000	201,848,000
Virginia.....	47,328,000	50,050,000
Total.....	679,314,000	731,559,000
United States.....	2,767,316,000	2,668,651,000

The Chicago market for No. 2 white corn on December 4, 1909, was 61.5 cents per bushel, and December 4, 1908, 66 cents per bushel.

In my opinion, the world will now consume 15,000,000 bales per annum of our cotton, and at a price in excess of the last 10 years' average. With the marvelous increase in the consumption of cotton a low price for it is likely a thing of the past, and it will probably be found that by the time 15,000,000 bales production is reached that the world is in need of considerable more. To reach these figures it does not by any means mean that there must be a unification of crops in the South; to the contrary, diversification and the production of farm necessities at home should continue and let the increase in cotton come from an increased production per acre.

In connection with the general subject of cotton, attention is called to a very interesting and instructive article by Dick Bros. Company, New York, on the expanding uses of cotton, and also a very entertaining series of articles by Daniel J.

Sully, entitled "King Cotton's Retinue," which appeared in the February, March and April numbers of the *Cosmopolitan Magazine*. The reading of these articles creates much added interest in the production of cotton, and also adds to the information of the cotton producer as to the value and uses of his product.

In 12 States of the South is produced 75 per cent. of the raw cotton of the world, and this production excels not only in quantity, but in quality, and in this crop, which is now a necessity of the world, the Southern States possess a mine of increasing and inexhaustible wealth. Only a few years ago it was considered that the South was rich when it produced 10,000,000 bales of cotton and received for it an average of 10 cents per pound. If this be true, picture the financial condition in the South with a production of 15,000,000 bales at 15 cents per pound.

Uses of Cotton Expanding.

The article of Dick Brothers & Co., to which Mr. McKellar refers, and which was published in the *Memphis Commercial-Appeal*, contains the following:

"In the last 10 years the horizon of cotton has broadened so immeasurably that old traditions of the trade—former methods of calculation—are as antiquated as the stage coach. In the good old days the late Thomas Ellison of Liverpool used to express orthodox sentiment by stating that consumption made an average annual increase of 2½ per cent. per year, when calculated by five-year periods. It was quite simple: The world's population increased and new markets were developed, and the whole situation could be figured out with mathematical precision like the flow of the tides. True, it was admitted that greater expansion was possible, but not probable, until John Chinaman could be persuaded to add that two inches to the tail of his shirt.

"But in spite of the fact that John Chinaman has done nothing of the kind, and the world's population has shown no sudden increase, the trade today is confronted with the fact that in the last five years the spindles of the world have shown an actual expansion of more than 28½ per cent. Another cold fact is an actual consumption during the last year of 13,116,000 bales, notwithstanding the textile industry was emerging from a period of widespread depression, with talk of poor trade in this country and abroad. Why has a new record for consumption been established in the face of such conditions? Where has the cotton gone?

"After a careful investigation extending over a period of three months, we have come to the conclusion that the old hide-bound theory concerning cotton consumption will have to be abandoned. There might have been a regular increase of 2½ per cent. yearly if cotton had been valuable only for sheets, pillow cases, 'table linen', dress goods and the like. Under former conditions the South might have found 11,000,000 bales more than could be marketed at 10 cents a pound.

"But the old conditions do not exist today, and the world has just begun to find out the countless uses to which cotton is put. There is hardly an industry of importance today that does not pay tribute to King Cotton. The man who takes a trip on a train hardly realizes that the railroads of the country are among the largest consumers of cotton. Yet cotton duck is the basis of the air-brake hose; cotton duck is the basis of the enameled ceilings; the plush chairs are of cotton; the 'leather' seats in the day coaches and smoking compartments are cotton. An expert in the employ of one of the leading car-building firms of the country tells us that he believes the railroads and trolley lines in

this country alone require an amount of cotton cloth equivalent to 250,000 bales. His information, he says, leads him to believe that the use of cotton cloth in the same way is equally prevalent throughout Europe.

"The automobile is another heavy consumer of cotton. Our information leads us to place an estimate of 325,000 bales annually as the present amount of cotton required for motor cars. Of this total, about 290,000 bales are required for the cotton duck basis for the tires and the rest goes largely for the manufacture of 'leather' cushions and seats.

"It would be difficult to estimate the amount of cotton required yearly for the harvesting and marketing of our great cereal crops. Thousands of bales annually go into the making of bags, but even this aggregate might look insignificant compared with some of the other items in the harvesting of grain. It may not be generally known, but we believe we are conservative in stating that the largest individual contract for cotton goods in the world is the one placed annually by the International Harvester Co. It calls for millions of yards of cotton duck running from two and three pounds to the yard to go into the manufacture of aprons, carriers and elevators for thousands of reapers and binders, headers and threshers. There are many independent concerns engaged in the manufacture of this sort of machinery, and a recent authority places the output throughout the world at 1,500,000 new machines annually, and this calls for 50,000,000 yards of cotton duck running two to three pounds to the yard.

"Electricity is the most powerful agent in the world, but it cannot get along without cotton. Millions of miles of copper wire annually owe the perfection of their insulation to cotton yarns or tape of cotton cloth. Anyone familiar with the electrical trade can make his own calculation as to the probable aggregate. One of our friends in the yarn trade tells us that in normal times the sales in the New York market alone amount to 400,000 pounds of yarn weekly to the electrical industry.

"Ten years ago the armies of the world, with the exception of troops stationed in warm climates, were clothed in woolen uniforms. Today the service uniforms of the armies of the world consist of khaki cloth or something similar. The United States alone, which maintains a small standing force, requires about 3,000,000 yards of eight-ounce khaki cloth annually. When one comes to figure out the amount of khaki required for the military establishments of Great Britain, Germany, France, Russia and other countries, the total is likely to reach staggering proportions.

"The navies of the world use a tremendous amount of khaki and other duck running from eight ounces to eighteen ounces a yard. A manufacturer who supplies a large portion of this material for our navy tells us that more cotton duck is used by our battleships today than in the days when sailing vessels constituted our men-of-war. He also added that the decline of the sailing vessel had not brought about any decrease in the demand for cotton duck for merchant ships. While the sails have disappeared, cotton duck is so extensively used for awnings, coverings for launches and similar purposes that the amount of material required is even greater than the height of the old clipper trade.

"Another demand for cotton cloth has been created by the increasing use of cotton cloth for growing tobacco under shade. Several hundred acres of land in Connecticut are covered in this manner. Our large tobacco company uses 1,000,000 yards of cloth for its shade culture in Florida and Cuba. The same company

also uses 4,000,000 yards of cloth annually for making bags for two of its popular brands of smoking tobacco.

"Cotton bags have displaced barrels to a great extent in the shipment of sugar, salt and flour. The employment of bags in the sugar trade extensively is comparatively new, and is no small factor in the increased consumption of cotton. With cotton at 15 cents a pound the bags would be cheaper than barrels.

"Cotton plays an important part in the mining and marketing of coal. A heavy cotton duck is extensively used in coal mines for the purpose of ventilating chutes. It is called 'brattice cloth,' and while we are unable to get approximate figures on its use, our information is to the effect that thousands of yards are required annually throughout the Appalachian coal regions. About 15,000,000 yards of cotton duck annually are made into coal bags for delivering coal where a chute cannot be employed to advantage.

"There has been a great expansion of the use of tarpaulins. In the British possessions, especially in South Africa, the tarpaulin has displaced the old flax duck cover for flat cars, goods vans, wagon covers and tents. In South Africa, too, the cotton blanket has completely driven out the woolen blanket, and 4500 bales, 200 blankets to the bale, are imported by that country annually.

"Overcoats of cotton duck with blanket lining have taken the place of heavy wool and fur garments in the American and Canadian Northwest. It is estimated that 20,000,000 yards annually are consumed by this branch of the trade alone. These garments are warmer for outdoor work, and are waterproof as well.

"Thousands of bales of cotton annually find their way into the construction of fireproof buildings in our large cities. Wherever the steam and hot-water pipes are exposed, they are covered with asbestos sectional covering, around which is placed cotton duck.

"Cotton cloth has taken the place of wallpaper in thousands of modern homes. Buckram of cotton cloth is more extensively used today than burlap. It is fully as durable and lends itself more easily to attractive decoration.

"For the sake of brevity we have condensed in the form of brief paragraphs some of the new and unusual uses to which cotton is put. We have added rough estimates wherever they could be obtained.

"Several million yards annually are used in making cloth signs and advertisements. The American Tobacco Co. and similar concerns use enormous quantities of cloth in their large decorative advertisements.

"Pottery establishments use millions of yards of army duck annually for the purpose of squeezing water out of clay.

"The Government requires 4,000,000 yards of cotton duck annually for coin bags.

"Cement companies use about 8,000,000 yards of cotton bagging annually.

"About 2,000,000 yards of cotton duck annually are made into feed bags for horses.

"Wood pulp paper mills and other paper mills use enormous quantities of heavy cotton duck for driers. The material frequently runs 12 feet wide, and weighs from 7 to 10 pounds to the yard.

"Cotton drills and ducks to the extent of millions of yards annually are used for wagon tops, cushions, waterproof coats, 'pantasote,' etc.

"A heavy duck 46 inches wide is used to the extent of millions of yards annually for the purpose of filtering oils.

"Cotton duck is the basis of rubber belting and all kinds of rubber hose. Sales to these branches of the trade amount to 50,-

000,000 yards annually. Among the smaller uses, but making a heavy aggregate: In gloves to stiffen gauntlets, leggings, tennis and gymnasium shoes, duck canopy for shower baths where rubber formerly was used, covering of trunks and telescopes, binding of books, draining mines—heavy duck to the extent of 4,000,000 yards annually.

"While we do not presume to have set forth here more than a small portion of the uses to which cotton is put, the above items should go far toward showing that the staple is valuable aside from its merit as wearing apparel. There are many fields into which it enters where curtailment would be impossible except under extraordinary conditions. Even at a much further advance it would not be likely to enter into competition with the products it has displaced.

Cotton: World Spinners vs. Southern Growers.

[Written for the Manufacturers' Record.]

Bearing upon an interview with the editor of the MANUFACTURERS' RECORD in the *Atlanta Constitution* of November 29, republished in the MANUFACTURERS' RECORD of December 2, under the heading, "World-Wide Combination Against Cotton Growers," there has been correspondence between Mr. Charles Adamson, president of the Cedartown Cotton & Export Co. of Philadelphia, who has been an important factor in Southern development for many years, and the editor of the MANUFACTURERS' RECORD. At Mr. Adamson's suggestion, and in the interest of all persons concerned in the cotton question, the correspondence is here reproduced, with the elimination only of introductory matter:

Mr. Charles Adamson, December 2.

"I have been an admirer of your work in exploiting Southern resources for 20 years. During all that time I don't remember an article in your paper that did not meet with my approval except the one case of your opposition (which I could never understand) to the educational movement in which Mr. Ogden and others were interested.

"Having read with great care and interest your article on the combination against cotton-growers, I would be very much obliged if you could give me more information about this combination, and answers to the few questions that I will put in this letter, which I request shall be considered as personal, as I am asking for my own information, not for controversial purposes.

"1. Where can I get more detailed information in regard to Mr. Macara's plans?

"2. Where can I get any information as to any attempt to combine the millowners of the United States with the millowners, say, of England and the Continent, to cut down the price of cotton?

"I am a member of the American Cotton Manufacturers' Association, get their reports, and have a slight acquaintance with mill men, especially in the line of my own work, hosiery yarn, and must frankly admit I have never heard of any proposition to combine in this respect.

3. Admitting, for the purpose of this letter, that everything that you say in regard to Mr. Macara's attempts on behalf of English cotton manufacturers is correct, do you think it is due to any antipathy to the cotton-growers per se, but is it not rather due to the fact that the tremendous growth of the cotton-manufacturing industry in the United States, plus a protective tariff against foreign manufactured cotton goods, is making the American competition felt so keenly by the English cotton manu-

facturers that they, through Mr. Macara (if he is the mouthpiece of the united cotton industries abroad), may be giving an exhibition of silly talk on the lines that 'whom the gods destroy they first make mad.' Would it be improper for me to ask the names of any American manufacturers who are associated with the European spinners. In explanation I quote from your article:

"'But the cotton spinners, under the leadership of European spinners, and into which some Southern spinners have permitted themselves to be drawn, have formed a gigantic combination, backed by all the vast wealth of the cotton-manufacturing world, for the purpose of beating down the price of raw cotton to the point emphasized by Mr. Macara where the spinners 'shall obtain that control of the trade which will insure cheap cotton.'"

"4. Do you consider that Mr. Sully was working in the interests of the Southern cotton-growers—the farmers—or do you think he was working for Mr. Sully and I believe it was Mr. Brown of the New Orleans Cotton Exchange, and a pool of speculators of which he was the leader? Was it philanthropy for the farmer of the South, or was it a bit of rank, rotten speculation, and as a corollary to this question, do you believe that Mr. Macara and his associates defeated the Sully corner as he says:

"'The short-time arrangements in Lancashire are precisely what they were when we fought and defeated the "Sully" corner; that is, the mills are running 40 hours instead of 55½ hours each week. Or were the Lancashire mills and the Southern mills forced to shut down because the manufacturers of cotton could not get a market for goods on the basis of the abnormal prices to which Sully for a few days run cotton?"

"5. Do you believe that any cotton mill in England or America during that time or today would shut down if they could have bought cotton at Sully prices or the prices of today and sold their manufactured goods at a profit, no matter how small?"

"6. Do you believe that the cotton manufacturers of the United States are opposed to high-priced cotton, always provided that they can sell the goods manufactured from such high-priced cotton without entailing ruin to the mills?"

"I don't. I believe if cotton were \$1 a pound and the manufactured articles could be sold at a profit on this basis, and it was known it was going to be \$1 a pound forever afterwards, that the manufacturers would be highly pleased.

"It is one of the greatest fallacies that the Farmers' Alliance and its friends have tried to perpetuate that the mills were anxious to have low-priced cotton. If the mills could have cotton at a price of 12, 13, 14, even 15 cents a pound, subject to such legitimate fluctuations as demand and supply bring about, and these prices were more or less stable, dependent upon crop conditions year after year, the cotton mills would be as well satisfied as the farmers, because they are thoroughly satisfied with much smaller profits than the farmer demands. But would you, as a cotton-mill owner, take contracts to be delivered six months ahead and to be spun out of cotton costing 15 to 15½ cents—knowing that six months from now the new crop would be in, and also, I regret to say, knowing that you might run the risk of having the customer refuse to take his order if yarns were lower next June? You say:

"'If the world could absorb the great crop last year, when throughout the world there was almost universal industrial and general business depression, it is absurd to say that the world cannot absorb the present crop at present prices, considering the wonderful revival in business activity and the thrill of new life which is seen in every part of America and to a very considerable extent throughout the world. Against depression in railroad and industrial interests last year we now have abounding activity.'"

"Do you know that the great crop of last year was absorbed? Is it not a fact that with the actual cotton in bales carried over from last year and the stock of cotton in manufactured goods and yarns now being carried in mills and warehouses South and North, the shortage in the present year's crop, plus the stocks carried over, about equalize the difference in the present short crop? Is it not a fact that this carrying over of stocks was due to the fact that during the period of depression you speak of the mills could not sell at the prices then offered for manufactured goods and were obliged to store their product? Do you not know that today the price of yarns is held down by the fact that knitters and other users of yarn are stocked heavily because some of them have yarn that will run them for four months? If you are not aware of this, I tell you it is a fact. Do you think that this shows a combination of the mills against the farmer?"

"Will you kindly give me what you consider is the cost of raising cotton by the farmer, and what should be the cost for cotton if raised under modern, scientific methods? I believe that Mr. Nesbitt, Commissioner of Agriculture of Georgia, made a statement that cotton properly grown could be raised at a cost of 4½ cents a pound. I do not think there is anyone who will deny that cotton can be raised at 8 cents a pound. If this is so, and cotton sells for a profit of from 5 to 7 cents a pound to the farmer, do you think it is a sign of antagonism to the farmer if the mills hope to get a profit of 1 cent a pound, are glad to have ½ cent a pound, but cannot see any reason why they should run their mills and lose from 1 to 2 cents a pound. Commercially today cotton is worth about 13½ cents, taking price of manufactured cotton goods as a basis; that is, a mill could make a reasonable profit on 13½-cent cotton. At 15½ cents a pound there is a loss. Do you think it shows any antagonism to the farmers when the mills cannot afford to buy cotton and sell their goods unless it is at a loss?"

"Is the present price of cotton due to the farmers' combination, or is it due to the speculators in New York and New Orleans?"

"I must apologize for the length of this letter, but I was so forcibly struck with your article (and I may say, with all due respect, by the weakness of it) that, owing to the kindly consideration you have al-

ready to peremptuate that the mills were anxious to have low-priced cotton. If the mills could have cotton at a price of 12, 13, 14, even 15 cents a pound, subject to such legitimate fluctuations as demand and supply bring about, and these prices were more or less stable, dependent upon crop conditions year after year, the cotton mills would be as well satisfied as the farmers, because they are thoroughly satisfied with much smaller profits than the farmer demands. But would you, as a cotton-mill owner, take contracts to be delivered six months ahead and to be spun out of cotton costing 15 to 15½ cents—knowing that six months from now the new crop would be in, and also, I regret to say, knowing that you might run the risk of having the customer refuse to take his order if yarns were lower next June? You say:

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ways given me in the past, I have ventured to write to you personally in the hopes that you would, if you have any facts in your possession that will enlighten me, do me the honor of teaching one who has sat at your feet and usually listened to your words of wisdom.

"In conclusion, more and more every year has the thought grown on me what a pity it is—and even your admirable paper errs in this respect now and then—that the South should always be spoken of as if it were not an integral part of the United States—really as if it were a foreign country—and the interests of the South and its people and its farmers and manufacturers were something different on a plane apart from the rest of the United States, and as if it had to stand up for its own interests against other parts of the country, instead of recognizing that this whole complex United States is a complete whole, in which the interests of everyone are related, and where depressions occur they affect everyone.

"It does not seem to me that the facts mentioned in your interview warrant the inference that the cotton manufacturers' interests are hostile to those of the cotton-grower, or that the American manufacturers are combining to injure the farmers."

In Reply.

In reply to Mr. Adamson the following was written:

"The answers to questions raised by you will be found in the quotations made from Mr. Macara's own statements, but for more specific information I may say:

"Mr. C. W. Macara is chairman of the International Federation of Master Cotton Spinners and Manufacturers' Association. The interview from which I quoted, and which, as you will notice, was published in the *London Financial News*, was also published in the *New York Journal of Commerce* on November 27. In that Mr. Macara said:

"The International Federation of Master Cotton Spinners and Manufacturers' Association, which represents 95 per cent. of the spindles throughout the world using American cotton, etc."

"You will note in my interview criticizing Mr. Macara that I quoted him as saying that the purpose of the short-time running is in order that 'we shall obtain that control of the trade which will insure cheap cotton and a steady market, and that is what we desire.' You will also note that I quoted him as saying: 'Our short-time campaign today, on an international basis, is on a much bigger scale than when with short time we broke the 1904 corner.'

"Again Mr. Macara said, as I quoted in my interview:

"The short-time arrangements in Lancashire are precisely what they were when we fought and defeated the Sully corner."

"These are only a repetition of the quotations from Macara's interview. I did not say that Mr. Macara and his associates broke the Sully corner, but I quoted Mr. Macara as making that statement.

"You ask as to the connection of American manufacturers with this movement. The *Manchester Guardian*, September 25, 1909, published the following:

"Arkwright Club votes curtailment desirable because of lack of margin between price of cotton and goods. Ascertaining opinion of American spinners generally. What will International Federation probably do? Letter following. Parsons, President."

Mr. Macara replied as follows: "Received cable with greatest satisfaction. Have wired it to members International Committee strongly recommending continuance of international short time. Meeting of International Committee at Frankfurt 5th October will deal with the grave crisis. England having decided continuance short time, other countries are sure to follow. Macara."

Steps will of course be taken at once to ascertain the opinion of the International

Committee on the international short-time movement as to the feeling among cotton spinners in the respective countries represented in order that the subject may be discussed at the forthcoming meeting. The Arkwright Club is the largest organization of cotton spinners and manufacturers in America. It was this body which at the end of 1907 organized short-time throughout America and continued it almost entirely during the year 1908.

"You are no doubt familiar with the organization of the Arkwright Club. I presume you are also familiar with the fact that the action of the Arkwright Club and of other cotton-mill interests in the United States in favor of the plan of shutting down or running on short time has been generally and freely discussed in the newspapers of the South and North. If you have kept in touch with this discussion as it has gone on in these papers and the meetings of the mill people, you have doubtless seen that the proposition for a shut-down was considered from the standpoint that the cotton spinners of the world were generally in harmony with this idea. I undertook only to quote Mr. Macara's own statements as to what was the object of this movement, and he said it was in order that they 'shall obtain that control of the trade which will insure cheap cotton, etc.' I took Mr. Macara's statements as the representative of the International Federation of Master Cotton Spinners and Manufacturers' Association, and chairman of that association, which he says represents 95 per cent. of the spindles throughout the world using American cotton.

"As I stated in my interview, if individual mills could not make a profit in running at present prices they are perfectly justified in shutting down. But for the chairman of the association claiming to represent 95 per cent. of the cotton mills of the world using American cotton to make the statements that he made gave full justification for all that I said in my interview.

"I believe that a great many cotton manufacturers in Europe and America, long accustomed to low-priced cotton, always shudder at the possibility of a rise in price of their raw material, without stopping to figure whether it is possible that the manufactured goods may advance proportionately. This is pre-eminently true, and has been for 75 years, in England. For more than three-quarters of a century the English manufacturers have persistently and unceasingly fought for low-priced cotton. The history of parliamentary reports on the subject, as well as the history of discussions that have taken place in the mill circles of England for three-quarters of a century, show this very clearly. Some of our American mills at times seem inclined to follow their example. The conditions to which you refer on page 3 in regard to cotton mills taking contracts are very similar to what I constantly meet as a director of an iron company producing about 150,000 tons of pig-iron a year. The company has four furnaces in Alabama. When it cannot market its iron at a profit it either blows out its furnaces and waits until the market revives, or else it makes iron, stocks it and carries it until the market situation justifies its being sold. Because the price of iron often goes below the cost of production we never for a moment consider asking all other iron furnaces to join with us in blowing out. That is an individual action, each company deciding for itself. Mainly for the purpose of studying business conditions from the inside point of view, I continue on the executive committee of this iron company, as well as on the executive committee of one of our leading trust companies which has dealings with a number of Southern cotton mills. Broadly speaking, the world absorbed last year's cotton; just as broadly speaking, the United States absorbed last year 15,-

000,000 tons of pig-iron. And yet not all of this pig-iron went into consumption. Some of it was carried on the yards of the furnaces and some of it was carried on the yards of machine shops and foundries throughout the country. When the revival commenced in the iron trade four or five months ago there was a great deal of iron still unconsumed, but I hardly thought it necessary to go into exceedingly detailed statements, dealing broadly with the general situation. The cotton-mill situation in that respect has been almost identical with that of the iron business and with other manufacturing interests of the country.

"The question you raise as to the cost of producing cotton hardly requires much discussion. It is not, of course, possible to raise cotton, unless under especially favored conditions, at anything like 4½ cents a pound. But even if it were produced at 4½ cents a pound, that would have nothing whatever to do with the question of selling. Does a cotton-mill manager figure out carefully what it costs him to make cotton goods and then decide that, regardless of market conditions, he will seek to get only a moderate margin of profit on his finished stuff? Will he not, on the contrary, like other business men, seek to get the largest possible profit that the conditions will justify? I have seen pig-iron sold in Alabama at \$11 a ton, and I have also seen it sold at \$26 a ton, though the cost in both cases was about the same. The fact that people were willing to pay \$26 a ton for it, and anxious to get it at that figure, was a justification for charging that price. When the makers could not sell it at what they thought was a fair profit they were justified in blowing out the furnaces or else in stocking it and carrying it until they could sell at what they regarded a fair price. That is the situation in cotton production and cotton manufacturing. Secretary Wilson of the Agricultural Department, in his annual report of a few days ago, showed that the price of corn had increased over 200 per cent. in the last 10 years. But there is no combination to try to keep the price of corn down. The same thing is true as to the wheat situation. The advance in cotton may in part be due to speculators. I have no interest whatever in following their operations. I am alike opposed to the 'bull' speculators in cotton and the 'bear' speculators when they undertake to corner markets. But I think far-seeing men, who for the last five or six years have been studying the world's business conditions, and the increasing output of gold, necessarily saw that we are on a rising market for everything. Higher prices have been inevitable, and you have doubtless seen repeated statements to that effect in the *MANUFACTURERS' RECORD* ever since the question of increasing gold production came prominently to the front.

"There is an increasing cost in the production of cotton, just as there is in the production of wheat and corn and cotton goods. There is an increasing cost of labor, and, as far as I can see it, all must continue to advance by virtue of the economic conditions prevailing throughout the world. It would be most unfortunate to the Southern cotton-growers, with the cost of everything entering into the production of cotton increasing, to be forced to take low prices, or even prices which if few years ago would have been considered fairly profitable, but which today would not be profitable. I do not think the price of cotton is due to either the Farmers' Union or to the speculators, except in part. I think the speculators simply saw a situation and have availed themselves of it. If the conditions had not to some extent justified high prices the speculators could

not have brought about the situation as it is today.

"In the meantime it may interest you to think of the fact that while the English spinners have been doing all they could to break down the price of cotton, just as Mr. Macara says, they have been buying cotton very freely, and up to date, with a crop probably 2,000,000 bales or more less than last year, they have taken almost as much as they did last year. While asking the American spinners to join with them in shutting down, and while many American spinners have done this, the foreign spinners have been reaching for every bale of cotton they could get their hands on.

"For 25 years the *MANUFACTURERS' RECORD* has sought to impress upon the country the fact that the 'development of the South means the enrichment of the nation.' It has sought to encourage this along broad national lines, but we have recognized very fully the bitter criticisms against the South which have from time to time been found in many leading papers in the North and elsewhere. Intentionally or unintentionally, the South and the conditions in the South have been misrepresented; probably because they have been misunderstood. But the misunderstanding has been willful, and, therefore, productive of just as much harm to this section. We are, therefore, in justice to the South, compelled to treat the subject from that point of view at times, and that means justice to the country.

"And now as to the last paragraph of your letter. In view of the quotation I have given you from the telegram of the Arkwright Club, representing New England cotton spinners, and the reply of Mr. Macara, I am inclined to think that you will accept the inference drawn from Mr. Macara's interview as quoted by me, that the cotton-mill interests of the world are really united in an effort to break down the price of cotton. If not, then they should promptly disavow Mr. Macara's statements and insist that he does not represent their views. At present he speaks by authority as the chairman of the International Federation of Master Cotton Spinners and Manufacturers' Association, and not as an individual."

Mr. Charles Adamson, December 8.

Commenting upon these suggestions, Mr. Adamson writes:

"I appreciate your kindness in answering my letter of December 2. The quotation was taken from the *Manchester Guardian*, September 25, 1909, viz.:

"Arkwright Club advises curtailment desirable because of lack of margin between the price of cotton and goods" shows very conclusively that the statement made in my letter of December 2, on my knowledge of general conditions, was correct.

"I regret that your letter did not supply me with a single fact to show a probable combination of mill people against the cotton-growers.

"The analogies that you draw between the iron business and the cotton business I do not agree to. The raw materials, the ore out of which the iron is made—the ore crop, so to speak—is not subject to the same violent fluctuations that cotton is when speculators with money back of them bet that the crop is going to be small or large, producing conditions that by no possibility, short of gambling, can the cotton-mill manufacturer meet. If today the price of cotton had been determined by the question of supply and demand for cotton goods no one would be more pleased than the cotton-mill manufacturers. Rising prices, as you say, are the rule, but today the cotton manufacturers are making goods for next summer, and by the time the next crop comes in, if it is large, the bears in the cotton market can put the prices down and make the price for the

farmer just as they have this season, without the possibility of the mills making money unless they get in the market and gamble as all the rest of the world seems to be doing.

"In my own section I have reasoned against utterances of certain parties who have attempted to make the farmers of the section believe the mills were antagonistic to them. The farmer is not considered to be running a combination when he stores his cotton and refuses to sell until he gets a reasonable profit. I do not think when the manufacturer does the same thing on account 'of lack of margin between the price of cotton and goods' it is right or logical to say he is in a combination against the farmer. From what I know of the cotton mills of the South, there are no combinations. The mills have been built up by the energy of individuals, either natives of the South or strangers from the North, plus the assistance in most cases of considerable Northern capital. Many of these mills have had as hard a row to hoe as the smallest farmer, and all of them have been blessings to the farming communities in which they have been established and have raised the price of cotton locally. I feel it is a great mistake to try and bring about a point of view in this country where one class of any kind is arrayed or incited to array itself against any other class.

"It looks to me as if the farmer was being used as a stalking horse for what appears to be an attempt to get the same kind of a grip on cotton that has been obtained on iron and many of the other great industries of the country, or to bolster up the speculative element that is today, so far as I am able to judge of the situation, in possession of the cotton. Who owns the cotton now, the farmer or the speculator? Certainly not the mills.

"Appreciating as I do the very great work you have done for the South, I addressed my first letter to you in the hopes that I would get something that would enlighten or convince me. I cannot agree with your conclusions. I still firmly believe that the interests of the farmers and the mills are identical.

"You have an enormous following who believe firmly in you. I know, as you state, that you are not interested in either the bull or bear side of the market, and if I might be allowed to make a suggestion, it is this:

"I believe most firmly that the exchanges, whether they are stock, cotton, wheat, corn or any other commodity that is dealt in by the public, should be so regulated that when a man sells a unit of any one of the articles mentioned he will have to present a certificate showing that he is selling something he has or buying something that can be delivered to him. This will go a long way toward correcting many of the abuses now existing.

"I note what you say in regard to my criticism and objection to the point of view that consider questions relating to the South as if the South were almost a foreign country. My sole interest for the last 20 years has been in the South. My sole desire is to be kindly and broad-minded. I have no prejudices. I merely touched on this point because my 20 years' experience has shown me the *pit* of the view I referred to. It is such a big subject, however, that time, immigration and the ebb and flow of people due to the improved railroad conditions will alter it.

"If there is a combination of cotton manufacturers against the cotton-growers, which I doubt, it will be of interest to hear from both sides. If you think it worth while to publish our letters, I withdraw my restriction."

A Few Closing Words.

[In closing, the MANUFACTURERS' RECORD may, perhaps, be permitted to suggest that Mr. Adamson had probably not seen the quotations in our issue of December 9 from the *Textile Mercury* of Manchester of November 20 and November 27, recording correspondence between Mr. Macara, president of the International Cotton Federation, and officers of the American Cotton Manufacturers' Association, representing Southern spinners. This correspondence, in our opinion, evidences an understanding on both sides of the Atlantic as to short time in the cotton mills. We do not believe that this short time, predicated upon high prices for cotton, implies any personal hostility on the part of the spinners against the cotton-grower. Our contention is that should an international agreement for short time reduce the price of cotton, the growers would be the immediate sufferers, but that in that suffering everybody interested in the cotton industry would share. We repeat.

Mr. Macara, as chairman of the International Federation, and claiming to represent 95 per cent. of the cotton spindles of the world using Southern cotton, specifically stated that the short-time campaign is in order that "we shall obtain that control of the trade which will insure cheap cotton and a steady market." To this may be added the editorial of the *London Financial News*, which first published Mr. Macara's brutally frank statement, which, in referring to the short-time movement, said:

"This is a war campaign, and if the campaign be successful it will break down the American corners which so frequently come into aggressive being, and will tend largely to the end that many in the cotton trade aim at, namely, a plentiful supply of cotton at a reasonable price."

The *Textile Mercury* of December 4, referring to this movement, says:

"In his lengthy cablegram Mr. Macara described the Liverpool message as being absolutely untrue, and he urged Americans to continue their reduction in output on the grounds that it would have the effect of breaking the back of speculators, with such satisfactory results as followed the organized curtailment in 1903-04, and his statement has been given publicity in all American papers."

The correspondence, by letter and cable, which passed between Mr. Macara, representing European spinners; the Arkwright Club, representing New England spinners, and the American Cotton Manufacturers' Association, representing the spinners in the South, shows that all of these various organizations are working in harmony, and Mr. Macara says that their work is for the express purpose of breaking down the price of cotton. Mr. Adamson says:

"If there is a combination of cotton manufacturers against the cotton growers, which I doubt, it will be of interest to hear from both sides."

If the cotton manufacturers of this country are not a party to Mr. Macara's work and his effort to force prices of cotton down to the point where the spinners can secure "control of the trade, which will insure cheap cotton," then it behooves them to be very prompt and very emphatic in their repudiation of Mr. Macara.

The MANUFACTURERS' RECORD has presented this situation not from any antagonism to the cotton mills of this country, but as a friend warning them, if they are a party, as Mr. Macara claims, to the world-wide combination for the purpose of depressing the price of cotton, they are playing a dangerous game. To suppress facts of this kind would be not only a

great injustice to the cotton growers of the South, who have the first right of protection on the part of every man interested in Southern welfare, but will be an injustice to cotton manufacturers themselves. If they are not in combination with Europe for the purpose of breaking down the cotton market, then they ought not to permit Mr. Macara to publish such statements broadcast over the world.

The MANUFACTURERS' RECORD yields neither to Mr. Adamson nor to anyone else in enthusiasm and commendation of the good work which the building of cotton mills in the South has done for the cotton growers of this section, as well as for the people generally. The cotton mills have been the greatest missionary that has preached the gospel of betterment in the South. They have made it possible for the hitherto unemployed people to find employment in thrifty communities where the teacher and the preacher could reach them to much better advantage than in the scattered mountain homes of former years. The cotton mills have been a very great blessing to many millions of people in the South, and we do not for a moment pretend to say that all of them have joined forces with Mr. Macara's work. Many of them have doubtless run on short time because they could not make cotton goods at a profit at prices prevailing for the finished article. Had the mills of the world accepted the situation and reduced their production of cotton goods until an advancing market made profits possible without joining the mills of the world in an effort to break prices, they would not have placed themselves in the position with which they are now confronted of having been proclaimed by their chosen leader as having united for the express purpose of bringing about a lower price for cotton. If the tactics of Mr. Macara and his associates, based on the claims of a larger yield of cotton than has been gathered, had been successful, and had cotton prices been driven down as they struggled to do, the cost to the South would have been many millions of dollars. A cotton crop of 10,000,000 bales sold at 10 cents a pound would have been a national disaster. The actual loss to this section under such conditions as compared with a fair price per pound for so small a crop would have been greater than the total investment in all the cotton mills of the South.—ED. MANUFACTURERS' RECORD.

A Cotton Crop Estimate.

The Crop Reporting Board of the Bureau of Statistics of the United States Department of Agriculture estimated last Friday from the reports of the correspondents and agents of the bureau that the total production of cotton in the United States for the season of 1909-1910 will amount to 4,826,344,000 pounds (not including linters), equivalent to 10,088,000 bales of 500 pounds gross weight. The estimated production in 500-pound gross-weight bales, by States, is as follows:

Virginia.....	10,000
North Carolina.....	615,000
South Carolina.....	1,095,000
Georgia.....	1,800,000
Florida.....	57,000
Alabama.....	1,020,000
Mississippi.....	1,020,000
Louisiana.....	280,000
Texas.....	2,570,000
Arkansas.....	715,000
Tennessee.....	240,000
Missouri.....	49,000
Oklahoma.....	617,000
United States.....	10,088,000

The average weight per commercial bale in the season of 1908-1909 was 471.5 pounds. On that basis the estimated crop of 1909-1910 season would be 10,240,000 bales.

Bearing upon the latest Government estimate of the crop, Mr. Atwood Violet of Atwood Violet & Co., New York, says: "A conclusion I have arrived at in con-

nection with the bureau's announcement of the 10th inst., giving their estimate of the current crop as 10,088,000 bales, is about as follows:

"The Agricultural Department could not have but known, because of the wide publication in the press of this country during the past 60 days of the estimates of the crop of the various cotton exchanges, domestic and foreign; private firms and private crop-reporting bureaus, that the average of same was, perhaps, between 10,750,000 and 11,000,000 bales. With the conservatism of the bureau in giving crop estimates, not only as to the cotton crop, but crops of all kinds, because of making their announcement only after most careful investigations, they would not have committed themselves to 10,088,000 bales as the yield of the current crop, leaving out, as usual, linters and repacks, had they not had strong evidence of the correctness of their figures.

"Therefore, as their estimate was very much smaller than general expectations, it gives me the impression that they leaned in this last instance toward a maximum rather than otherwise in giving out the aggregate results of the reports of those representing the bureau in the South. In other words, the character of information they received was of such a nature as will probably prove, in the end, that 10,088,000 is an outside figure. All information for weeks past has indicated that in no other season was the same percentage of the crop gathered and ginned as during the present season up to November 30, and therefore the amount unginned the bureau correspondents could more nearly arrive at than at any time since the Government began securing reports of the same character through that source.

"It seems to me, therefore, that those in charge found conditions in this respect so startling as to smallness that even after making the usual allowance for errors the results strongly indicate less than 10,000,000 bales.

"Another straw is contributed in a communication published in Pearsall's Bulletin No. 9 of this date (December 13), signed 'Ex-member,' and I quote from it as follows:

"In connection with the estimate of the Bureau of Agriculture, it has been stated in several papers that this estimate (of the 10th inst.) is the smallest of recent years, with the exception of the 'Sully Year.' As a matter of fact, it is smaller than in that year. In pounds of lint cotton the figures given by the bureau are as follows:

Crop of 1903.....	4,889,796,267 lbs.
Crop of 1909.....	4,826,344,000 lbs.
	63,452,267 lbs.

or a deficit of about 133,000 bales of 478 pounds net."

"If we take 133,000 bales from the crop of 1903-04 of 10,124,000, we have a present crop of 10,000,000 maximum.

"In order to verify the figures of 'Ex-member,' as quoted hereinbefore, I telegraphed to Mr. Henry G. Hester, secretary of the New Orleans Cotton Exchange, and I have his reply by wire as follows: 'I find your figures quite correct.'

"To what price cotton will advance should hardly be a matter of conjecture as soon as the world's spinners are satisfied that the bureau figures of Friday last are approximately correct, or will they be like the proverbial feminine, that

"A woman convinced against her will Is of that same conviction still."

It is estimated that this year's sales of zinc and lead ores in the Joplin (Mo.) district will reach \$14,642,722.

ALACRITY OF SOUTHERN COMMERCIAL BODIES FOR NEW INDUSTRIES

WHAT IS YOUR TOWN DOING?

The MANUFACTURERS' RECORD will be glad to receive from responsible correspondents in every town in the South brief items of news about business conditions and the opportunities for industrial enterprises. This information is desired for publication without cost of any kind to the sender, and regardless of whether the writer of the letter is a subscriber or not. The MANUFACTURERS' RECORD accepts no paid town write-ups. It seeks information of this kind from commercial and industrial organizations and from municipal authorities in every town and city of the South.

McALESTER'S OPPORTUNITIES.

The Commercial Club,
McAlester, Okla., December 7.

Editor Manufacturers' Record:

McAlester wants factories, mills and industries of all kinds, and has the raw material, accessories and market for them.

McAlester is a city of the first class, with about 15,000 people in the city limits and 30,000 additional reached by the inter-urban electric line (the first constructed in the State). McAlester is located in East Central Oklahoma; is the headquarters of the richest coal fields in the State, and has excellent shipping facilities, being on the main line and a branch of both the Rock Island-Frisco lines and the Missouri, Kansas & Texas Railway system, and is division headquarters of the latter. Also has more railroads assured, construction having been commenced on one and three others chartered and surveyed.

Nature has richly endowed our city, giving us many minerals in addition to coal. The State Geologist states that our clays and shales are unsurpassed for the manufacture of brick and tile, and that "this is an ideal location for a monster Portland cement plant. You have the limestone, the clay, the fuel and the water." It is confidently asserted that within a radius of 35 miles of McAlester there may be assembled all the elements necessary for the manufacture of the highest grade of steel. Our soil is rich and especially adapted to fruit and truck raising. Any temperate and many torrid zone products flourish in this soil and climate. Much of the surrounding country is heavily timbered with pine, oak, ash, elm and hickory. This is indeed the land of the Fair God.

McAlester has long been an excellent jobbing center, now having 17 wholesale houses, all in prosperous condition and proving that this is the natural distributing point for the Southwest. Many factories are located here and more knocking at the gates. With them we will fulfill Jay Gould's prophecy: "McAlester is destined to be the Pittsburg of the Southwest."

Our schools, churches and social organizations surpass those of any city of equal size in the country. The city is at present expending over \$1,000,000 in municipal improvements, most of which is street paving and sewer construction, securing us in our claim of having the most beautiful and healthful city in the State.

We want and offer exceptional inducements for plants for the manufacture of cement, sewer pipe and tile, pottery, cotton products, vehicles and farm implements of all kinds, fence material, furniture, school, bank and office supplies and many other products. Also have splendid openings for wholesale clothing and drug houses, canning factories and packing plants.

W. P. FREEMAN,
Secretary.

FOR BIG DRAINAGE.

The Business Men's League,
Greenville, Miss., December 9.

Editor Manufacturers' Record:

There will be a conference in Greenville some time in the latter part of December, probably the 20th, for the purpose of again

taking up the Black Bayou drainage proposition, a matter of great interest to this entire section of the Delta. The Black Bayou is a sluggish water route which originally drained a territory extending from the southwestern part of Bolivar county south through Washington to the extreme southern ends of the latter county, finding an outlet in Lake Washington a few miles north of the northern boundary of Issaquena county. Some of the richest lands in the world are situated on either side of this natural canal. In former years when the overflow from the Mississippi River was of such frequency as to keep the channel clear of obstructions these lands were under a very high state of cultivation. However, this watercourse has been permitted to fill up until there is no satisfactory drainage of the thousands of acres of fertile lands absolutely dependent upon it as the means for carrying off the excess water. For a distance of several miles in either direction planting interests have declined, and many of the former finest plantations in the Delta have grown up in grass.

Two years ago an attempt was made to get a bill through the Mississippi Legislature creating the Black Bayou Drainage District, but opposition developed from Issaquena and Sharkey counties and the measure was defeated in the Senate after running a perilous course through the lower house. Since 1907 there has been a marked change in sentiment, and the conference this month will be for the purpose of unifying all factions and agreeing, if possible, upon the terms of a bill which Governor Noel has promised to get before the Legislature at its January session. The reclamation work, if it meets with a successful issue, will place again on the market and under cultivation an amount of land half the size of Washington county and will mean the development of vast tracts of timber lands now inaccessible a large portion of the year.

The Greenville Business League is fathering the movement to bring all factions together, and sufficient replies have been received from prominent planters and landowners throughout the territory concerned to justify the hope that all differences are going to be amicably settled at the forthcoming conference.

Financial conditions in and around Greenville have seldom been better than now. The yield of cotton was short, but the price of the staple scattered prosperity in this greatest of cotton countries. Negro tenants are flush with money, and are paying their accounts in full. As a consequence of their possession of ready money a great deal of live-stock is being sold at present in this market, the transaction being usually cash.

The announcement last week in the press that the boll-weevil had been discovered in the upper reaches of Yazoo county brings the pest very near to this cotton center. Planters are looking with confidence to the appearance of the worm in this and adjoining counties either in 1910 or 1911, and as a consequence are beginning now to prepare for a change from all cotton to diversification.

The experiment of Hon. Chas. Scott in rice culture has attracted attention to this

product, and many planters will next year put part of their acreage in the grain. Corn will be more extensively planted in the Greenville district in 1910 than ever before in the history of this section. A Washington county planter who had this year over 6000 acres under cultivation has already made purchase of several cars of breeding cattle, and will go largely into the cattle business, setting aside about 2000 acres for range and feedstuffs, such as alfalfa, ensilage and cowpeas. The Greenville Business League is endeavoring to get a rate established from points of loading to this city which will justify other planters in bringing in large herds of cattle for cattle-raising and feeding.

With such fair prospects before the drainage advocates, lands in and about this place are today regarded as the cheapest in the world. Thousands of acres that are at present regarded as waste will come back on the market at a greatly enhanced price, and the first sign that the Legislature will pass the act creating the district

QUIET AT BIRMINGHAM.

Few Developments in the Pig-Iron Situation.

[Special Cor. Manufacturers' Record.]

Birmingham, Ala., December 13.

During the past week sales have been made of several round lots of pig-iron by the furnace companies. One interest booked an order for 5000 tons to be delivered over the first quarter of 1910 at \$14.50 per ton base. The merchant interests also sold several small lots, some on basis of \$14.50 per ton and some at \$14 per ton at the furnace. The matter of preference, it seems, hinged on who the buyer was, how badly he needed the iron, etc. The fact that most of the warrant iron has to be moved before January 1 or holder pay storage charges thereafter is a controlling factor, and substantial shipments of warrant iron have been made the past week or so. The furnace companies proper have not indulged in promiscuous shading of prices, and where iron was sold or quoted on basis of \$14.50 per ton at the furnace it was based on prompt shipment or first-quarter delivery. For second-quarter or first-half business the furnace companies want \$15 per ton at the furnace. The books of the companies here, so far as can be ascertained, have not yet been opened for third-quarter or second-half business. There is still a premium being asked for low-grade iron, and this metal is very scarce. Southern charcoal iron has been holding firm for some time at \$22 per ton at the furnace, and today we doubt if it could be had in any considerable quantity at a less figure than \$22.50 per ton at the furnace.

When asked as to the situation of the cast-iron pig market a representative of one of the large interests here replied that, on the whole, things are looking good—much better than even a week ago, and exceptionally good, considering this season of the year, which is usually a dull period. Inquiries are holding up well, and fairly good shipments are being made to the middle and extreme West, particularly Texas and Arkansas. Following are prices firmly quoted per net ton f. o. b. cars at the foundry: 4-inch, \$25; 6, 8 and 10-inch, \$23; 12-inch and over, average of \$22; fittings, \$60; gas pipe a dollar a ton over above pipe prices.

The old-material market continues to drag along in about the usual way. Dealers have now ceased to diligently seek scrap, and stocks on the yards is comparatively large. On account of it being

is going to bring about considerable activity in the land business.

F. M. RUNNELS,
Secretary.

BONUSES FOR PLANTS.

Young Men's Commercial Club,
Hope, Ark., November 29.

Editor Manufacturers' Record:

At a mass-meeting of our citizens the sum of \$80,000 in cash was raised to be used as bonuses to manufacturing plants that will locate at or in the immediate vicinity of Hope. This fund, or any part of it, is available to any and all bona fide manufacturing industries that will locate with us.

R. L. PRITCHARD,
Secretary.

Detailed information about towns seeking manufacturing enterprises and offering specific advantages for development and business opportunities can be found under the head of "Classified Opportunities" on pages 80 and 81, and under "Cities, Towns and Railroads Inviting Factories" on pages 118, 119 and 120.

Inventory time with most of the consumers throughout the country, there is little hope for any material change until after the holidays and into next year. Within the next few months there will be a material increase in home consumption of scrap with the starting of operations of the Southern Iron & Steel Co. and the already going concern at Sheffield, Ala. Following prices per gross ton f. o. b. cars here are asked:

Old iron axes, \$20 to \$20.50.
Old iron rails, \$15.75 to \$16.25.
Old steel axes, \$17.75 to \$18.25.
No. 1 railroad wrought, \$14 to \$14.50.
No. 2 railroad wrought, \$12 to \$12.50.
Dealers' wrought, \$11 to \$11.50.
Old steel rails, \$12.50 to \$13.
No. 1 machinery, \$12.50 to \$13.
No. 1 steel, \$12.50 to \$13.
Old standard car wheels, \$13.75 to \$14.25.
Light castings, stove plates, \$10 to \$10.50.

Cast borings, \$6.50 to \$7.

The North Alabama Rolling Mill Co., which plant is located at Sheffield, Ala., and is the reorganization of the old Sheffield Rolling Mills Co., resumed operations on the 6th after an idleness of some two years. Modern and substantial repairs have been made on this plant and every indication points to a most successful operation. Up-to-date machinery in every respect has been installed.

Birmingham is to have as its honored guest this week Judge Gary, chairman of the United States Steel Corporation. He is coming to the district simply on a tour of inspection and to take a look at the properties of the Tennessee Coal, Iron & Railroad Co. No plans are expected to be announced as to new projects, etc., for that is a matter entirely in the hands of the officials of the different subsidiary companies.

The Cotton Movement.

In his report for December 10 Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, shows that the amount of cotton brought into sight during 101 days of the present season was 6,245,562 bales, a decrease under the same period last year of 950,215 bales. The exports were 3,294,567 bales, a decrease of 376,989 bales. The takings were, by Northern spinners, 950,239 bales, a decrease of 215,733 bales; by Southern spinners, 776,191 bales, an increase of 4134 bales.

GOOD ROADS

WEEK'S HIGHWAY RECORD.

Progress in Southern Road and Street Improvement.

[Full details of highway undertakings are given in the Construction Department.]

Bonds Voted.

Chapin, Tex.—Hidalgo county voted \$100,000 of bonds for road construction.
Macon, Ga.—City voted \$100,000 of bonds for paving.

Bonds to Be Voted.

Richmond, Tex.—Fort Bend county votes January 1 on issuance of \$150,000 of bonds for road construction.

Contracts Awarded.

Knoxville, Tenn.—Board of Public Works awarded contracts for laying concrete sidewalk on East Jackson avenue.

Pine Bluff, Ark.—City awarded contract at \$85,000 for creosoted-wood block paving.

Scranton, Miss.—Jackson County Supervisors awarded contract for constructing 13 miles of road.

Contracts to Be Awarded.

Durham, N. C.—City opens bids December 20 for grading three streets; 20 cubic yards of excavation.

Jacksonville, Fla.—Duval county opens bids January 5 for resurfacing 25 miles of road.

Mobile, Ala.—Board of Public Works approved estimates for concrete paving on Water street to cost \$6400, and estimates paving, guttering and draining for Spring Hill avenue, Davis avenue and Broad street at \$179,000.

Newbern, N. C.—City opens bids January 4 for 40,000 square yards of paving; \$51,000 available.

Oklahoma City, Okla.—City opens bids December 20 for grading, curbing and paving on certain alleys.

Mississippi Relay Race.

Pascagoula Commercial Club,
Scranton, Miss., December 11.

Editor Manufacturers' Record:

On December 6 the Board of Supervisors of this county (Jackson) gave out the contract for building a speedway from Pascagoula to the Alabama State line, a distance of about 14 miles. It will meet there the speedway that is now being constructed from Mobile to the Mississippi line. On Thanksgiving Day there was a relay race along the proposed route made by a party of the Young Men's Christian Association of Mobile to carry a Thanksgiving greeting from the Mayor of that city to the Mayor of Pascagoula. Mr. Arthur Allen in his auto, and accompanied by the writer, Claude Delmas and Fred Cooper, acting as a committee of greeting from the Pascagoula Commercial Club, rode six miles out from the city and met the runners and acted as guide and escort for them and their attending autos. When they reached Market street, about nine-sixteenths of a mile from the courthouse, all of the runners, 13 in number, joined in the race to the goal, where they delivered their message to Mayor A. G. Delmas, who returned a very cordial reply. The entire distance covered in the race was 43 miles. After receiving the reply of the Mayor of Pascagoula, the runners and other members of the Young Men's Christian Association were banqueted at the hotel, and then Mr. Allen again with his auto, with the writer, Prof. P. P. Linfield, superintendent of city schools, Claude Delmas and Fred Cooper, escorted them outside the city limits, where we bade them good-by. The relays race has done much to cement the cordial relations already exist-

ing between Mobile and Pascagoula, and has aroused much enthusiasm for good roads and speedways throughout the Gulf coast. As soon as the speedway is finished Mr. Allen proposes with his auto to make a tour of inspection of the route from Pascagoula to Mobile and return.

CHAS. E. CHIDSEY.

A Texan County.

Mr. W. J. Garrett of San Augustine, Tex., informs the MANUFACTURERS' RECORD that about 25 or 30 miles of roads will be built in San Augustine county within the next 12 months at a cost of about \$5000. He adds:

"The sentiment in the county for good roads is not as enthusiastic as it should be, but there has been voted and levied, in addition to the regular road tax, a special tax of 15 cents on each \$100 of assessed value of property in the county for the improvement of roads. This will be expended first on drainage and grading. That portion of our public roads in the red-land belt needs only grading for drainage to make splendid roads."

Notes.

The International League for Highway Improvement, John A. Stewart of New York, president, and Harry Brown of St. Augustine, secretary, will hold its first annual meeting at St. Augustine, Fla., on January 26.

Under the impulse of State Highway Commissioner C. P. Light, a meeting of county judges and county engineers of West Virginia was called for Parkersburg this week as a step toward organizing the good-roads campaign in that State.

The State Good-Roads Association of Virginia has elected Messrs. Charles T. Lassiter of Petersburg, president; R. W. Withers of Suffolk, vice-president and chairman of the executive committee; R. L. Harwood of Richmond, secretary and treasurer, and George W. Rogers of Richmond, assistant secretary and treasurer.

Nashville & Adairville Interurban.

The Nashville & Adairville Railway Co. has applied for a charter in Tennessee to build an interurban line about 40 miles long from Nashville via Goodlettsville and Whitehouse, Tenn., to Adairville, Ky. The capital stock is \$25,000, and it is said the road will open up a rich mineral and timber territory, besides country which is also devoted to farming. An electric power plant will be constructed. The incorporators are W. A. Buntin, B. P. Gilbert, H. M. Hayes, S. C. Robb and R. A. Wilson.

Texas Cottonseed Crushers.

The executive committee of the Texas Cottonseed Crushers' Association will meet at Waco on January 28 and 29 to perfect plans for the annual meeting of the association. Charles W. Holman of Dallas is the secretary of the organization.

At the suggestion of Mr. Lewis W. Parker, president of the Olympia, Granby and Richland Mills, a textile club has been organized at Columbia, S. C., with W. P. Hamrick, president; W. A. Black, vice-president, and E. H. T. Foster, secretary-treasurer.

In addition to officers previously reported, the Seaboard Air Line directors have elected T. W. Roby, comptroller; also the following appointments were approved: R. L. Nutt, assistant secretary; W. J. Calvert, assistant treasurer; Leigh R. Watts, general counsel; Byrne & Cutcheon, advisory counsel.

RAILROADS

[A complete record of all new railroad building in the South will be found in the Construction Department.]

MISSOURI PACIFIC.

Many New Industries Established During the Year—Good Drainage Work.

The annual report of the Missouri Pacific Railway Co., just issued, which is the twenty-ninth of that corporation, covers the fiscal year ended June 30, 1909. It shows gross revenues, \$46,385,542; operating expenses, \$33,926,513; net revenues, \$12,459,029; total income, \$14,153,073; surplus for the year after the payment of taxes, interest on bonds, rentals, etc., \$1,064,509.

President Gould says: "Owing to the decreased revenues of the previous year, brought on by the severe business depression which then obtained, a very rigorous retrenchment in expenses was effected in all departments for that year. This necessitated a more liberal outlay for maintenance of way and maintenance of equipment for the year under review, and as a consequence the operating expenses for the year increased \$2,280,255.

"Considering the good average crops which have been harvested, the high prices which prevail for farm products and the steadily growing activity in industrial and mercantile pursuits, the outlook for a good general business the ensuing year is very encouraging."

The total revenues from operation (\$46,385,542) show an increase as compared with last year of \$2,146,839; the total expenses (\$33,926,513) an increase of \$2,280,225; the net operating revenue (\$12,459,029) an increase of \$133,385, and the total income (\$14,153,073) an increase of \$1,314,640. The net income after the payment of taxes, hire of equipment and other charges was \$10,444,816, an increase of \$1,086,088; the net surplus after the payment of fixed charges and rentals \$1,064,509, increase \$14,002. The total mileage operated was 6488 miles.

The company spent during the year for additions and improvements \$907,165.

The equipment consists of 1041 locomotives, 617 passenger cars, 39,044 freight cars and 5896 service cars.

The company sold during the year 13,441 acres of its lands in Missouri and Arkansas at an average price of \$5.51 per acre, leaving unsold 2808 acres in Missouri and 516,603 acres in Arkansas.

There were located during the year at stations along the lines 329 industries of various kinds, in which were invested \$15,196,000, and they are expected to produce annually 118,500 carloads of goods for transportation. Among these industries are a steel bridge plant, an automobile factory, a starch mill, two car factories, 22 cement, brick, stone and other plants for the manufacture of building materials exclusive of lumber, 85 sawmills and other woodworking plants, nine new coal mines and 43 lumber, wood and coal yards. Owing to the business depression and uncertainty as to the tariff, little activity was seen in developing zinc, lead and iron-ore properties. Only two zinc mines and one small iron mine were opened along the lines. Good work is being accomplished in the eastern part of Arkansas and Louisiana by reclaiming swamp and overflow lands as a result of interest in drainage being awakened by representatives of the company.

Uvalde to Batesville.

The Uvalde & Leona Valley Interurban Railway Co. has been chartered in Texas to build a line 25 miles long from Uvalde to Batesville. This will run through a

level country consisting of rich valley lands, and will require only two wooden bridges. It is not yet decided when bids for construction and equipment will be received. The capital stock is \$50,000. The officers and incorporators are Chas. Peterson, president; A. M. Avant, vice-president, both of San Antonio, Tex.; M. M. McFarland, vice-president and general manager; F. J. Rhiner, secretary and treasurer, and W. D. Love, general attorney, all of Uvalde, Tex.

TALK OF A TRUNK LINE.

Manufacturers' Railway of St. Louis Contemplates Extension and Alliances.

The Manufacturers' Railway of St. Louis, Mo., according to a report from that city, contemplates an extension and connections which may lead to the formation of a new trunk line in the Southwest. This road, which at present is about 20 miles long and serves the Busch Breweries and other industries at St. Louis, has under consideration the construction of a line to Springfield, Mo., besides building a belt line on the Illinois side of the Mississippi River near St. Louis.

Relative to the trunk-line project, it is said that G. F. Moore, president of the Manufacturers' Railway, has communicated with officers of the Midland Valley Railway, the Missouri, Oklahoma & Gulf Railroad and the Fort Smith & Western Railway, saying that an alliance with them might be found desirable and of mutual advantage. The Manufacturers' Railway owns at St. Louis and in that vicinity several hundred acres of land which may be used either for railroad purposes or for the building of industrial plants. Thus far it appears that no decision has been reached regarding any alliance with the other lines mentioned. If connection were made with them, the Springfield extension of the Manufacturers' Railway would have to be carried much farther, to Fort Smith, Ark., or some other point, in order to reach the lines, or else traffic arrangements would have to be made with the Frisco system between to make connection. It appears that when the Springfield extension was first thought of a connection with the Frisco was in view.

The Midland Valley Railroad runs from Fort Smith, Ark., northwest via Muskogee and Tulsa, Okla., to Arkansas City, Kans., 273 miles. It has a branch-southeast from Fort Smith to Hartford, Ark., 39 miles, with a spur four miles long to Greenwood, Ark. The Fort Smith & Western Railroad runs west from Fort Smith, Ark., to Guthrie, Okla., 217 miles, connecting there with the St. Louis, El Reno & Western Railway, which is controlled by the Fort Smith line for El Reno, 42 miles farther west. The Missouri, Oklahoma & Gulf Railway is now operating a main line 100 miles long from Wagoner, Okla., southward via Muskogee, Henryetta and other points to Wapanucka, with branches, one of five miles to Lowerree, another from Dewar to Clarence of the same length, besides spurs to mineral lands. The section now under construction is from Durant, Okla., to Sherman, Tex., via Denison. The company will also build from Wagoner northward to Joplin, Mo., after the southern extension is completed.

Such a combination as is outlined in the report from St. Louis would provide a new road which might be an important factor in the Southwest.

New Equipment, Rails, Etc.

The Gulf, Texas & Western Railway Co., Dallas, Tex., has purchased from the American Locomotive Co. of New York four mogul freight locomotives and two American-type passenger locomotives. It

has also purchased from the Haskell & Barker Car Co. of Michigan City, Ind., eight passenger cars and 116 freight cars. It has likewise bought 75 miles of rails.

The Nashville, Chattanooga & St. Louis Railway has ordered equipment as follows: Four 10-wheel passenger locomotives from the Baldwin Locomotive Works, Philadelphia; five passenger cars, 200 box cars and 100 hopper-bottom cars from the American Car & Foundry Co. of St. Louis, and 4000 tons of 80-pound rails from the Tennessee Coal & Iron Co., Birmingham, Ala.

The Oklahoma Railway Co. of Oklahoma City, Okla., has ordered 10 closed cars 20 feet long and 10 closed cars 45 feet long from the American Car Co. of St. Louis and the Niles Car Co. of Niles, O.

An officer denies a report that the San Antonio & Aransas Pass Railway is in the market for equipment.

The St. Tammany & New Orleans Railway & Ferry Co., Covington, La., will, it is reported, spend about \$35,000 for equipment, and five new cars have been ordered from the Sheffield Car Works of Three Rivers, Mich.

The St. Louis & Southwestern Railway is reported to have ordered 10 consolidation locomotives and 6 10-wheel locomotives from the Baldwin Locomotive Works and 14 passenger cars and 6 chair cars from the American Car & Foundry Co.

The Kilby Locomotive and Machine Works, Anniston, Ala., according to a dispatch, has ordered 3000 car axles from the Western Steel Car & Foundry Co. at the same place, and the plant has resumed operation.

The Rome Railway & Light Co. of Rome, Ga., is reported to have placed an order for some new equipment.

The Sugarland Railway Co., Sugarland, Tex., has bought one locomotive from the Baldwin Works.

The Louisville & Nashville Railroad Co., according to a report from Memphis, Tenn., has built a steam motor car capable of a speed of 65 miles per hour and which may be used for suburban service between Memphis and Ellendale. It is 72 feet long and is constructed of steel, with mahogany interior. It was designed by T. H. Curtis, superintendent of machinery for the road, and will carry 60 passengers.

New Line Expected to Little Rock.

A letter to the MANUFACTURERS' RECORD says that it will probably be but a short time before another railroad will be constructed parallel to the Rock Island division, which runs westward from Little Rock into Oklahoma. Concerning this it is remarked that the Little Rock, Maumelle & Western Railroad has been constructed westward from Little Rock about 20 miles, and it is wholly or in large part owned by the A. J. Neimeyer Lumber Co. This line will probably be absorbed by any road coming in from the west for the purpose of entering Little Rock. The Central Railway of Arkansas is another lumber road which proposes to extend from Ola to Hot Springs, but beyond constructing logging spurs it is not expected that this line will do much for some time.

With reference to the foregoing, it will be remembered that from time to time surveys have been made and movements started looking to the construction of new railroads in the western part of Arkansas, with the idea of building a new route to Little Rock, but thus far nothing has come of them.

Norfolk & Southern to Be Improved.

The Norfolk & Southern Railway, which was sold at receiver's sale under an order of the court at Norfolk, Va., on December

7, was bought in by the reorganization committee for \$8,500,000. The highest bid in opposition was by R. T. Thorp of Norfolk, who declined to state whom he represented. His best offer was \$8,100,000, and it was accompanied by a deposit of \$200,000 in cash to bind the bargain in the event of his bid being accepted.

The reorganization committee will now, it is expected, take steps to form a new company and carry out plans for improving the property. The receivership began in July of last year, and was one of the results of the panic. George C. Clark, John I. Waterbury, S. L. Schoonmaker of New York, Rathbone Gardner and Marsden J. Perry of Providence, R. I.; Oakleigh Thorne and C. L. Chadbourne of New York are prominently interested. Mr. Gardner bid for the committee. It is anticipated that a bond issue will be made for the purpose of carrying out the improvement plans. The system is about 600 miles long, and lies principally in North Carolina, although the beginning of it is in the southeast portion of Virginia.

A late dispatch says that Messrs. Perry and Schoonmaker will immediately inspect the property, with E. T. Lamb, general manager.

Frederick Lines Consolidated.

The Frederick Railroad Co. has been organized at Frederick, Md., and represents the consolidation of the Frederick & Middletown Railway Co., the Washington, Frederick & Gettysburg Railway Co. and the Jefferson & Braddock Heights Railway Co. The capital stock is \$1,500,000, of which \$250,000 is preferred and the rest common.

The first and the last road mentioned are electric lines, and the second is a steam road, which may or may not be converted to electricity. The Frederick & Middletown Railway, besides operating its own line, also operates the Myersville & Catocin Railway. It is expected that an extension will be made to Brunswick, Md., about seven miles, a route having been surveyed from Jefferson to that point. It is also contemplated to extend the Washington, Frederick & Gettysburg Railway from Thurmont, Md., the present northern terminus, to Emmitsburg, about seven miles, and thence to Gettysburg, Pa., about 10 miles further. The southern terminus of this line is Frederick, and there is at present about 16 miles of track in operation.

The officers of the company are Emory L. Coblenz, president; Dr. Franklin B. Smith, vice-president; Thos. H. Haller, treasurer, and Chas. C. Waters, secretary, all at Frederick, Md.

Christmas Cruise to Florida.

The Merchants & Miners' Transportation Co. has issued a folder describing a personally conducted Christmas cruise which will be made from Baltimore to Savannah, Jacksonville and St. Augustine, the steamer leaving Baltimore on Friday, December 24. The party will be limited in number, and will be escorted by a representative of the company, who will look after their comfort. Returning, they will arrive at Baltimore late on the evening of Saturday, January 1. For the accommodation of persons who desire to remain longer in Florida, return tickets will also be sold.

New Orleans, Mobile & Chicago.

An officer of the New Orleans, Mobile & Chicago Railroad Co., Mobile, Ala., confirms the report that it has taken over the Mobile, Jackson & Kansas City Railroad, the change having taken effect December 1. This means only a change in name, and no construction nor extension work is contemplated at present.

The following appointments have been

announced from the office of W. F. Owen, general manager, 111 North Royal street, Mobile: H. M. Hood, auditor; G. W. Crary, treasurer; W. L. O'Dwyer, general freight and passenger agent; McIntosh & Rich, general solicitors, all at Mobile; Flowers, Fletcher & Whitfield, special counsel, Jackson, Miss.; B. H. Gray, superintendent motive power, Mobile; D. W. Davis, superintendent transportation; A. F. Church, superintendent, both at Laurel, Miss.; C. F. Morgan, superintendent, New Albany, Miss.; J. J. Henry, claim agent; H. G. Reiser, purchasing agent, Mobile; L. L. Lawrence, manager industrial and immigration department, Laurel, Miss., and H. H. Bolton, immigration agent, Wilmer, Ala.

A late report says the company has authorized \$35,000,000 of bonds, part to be used for development.

Report on the "Orient."

A report on the Kansas City, Mexico & Orient Railway, made by E. Dickinson and J. T. Odell at the request of the company's financial committee in London and a large number of stockholders in America, has been published after a personal investigation of the line both in the United States and in Mexico. The report, which is in pamphlet form, describes the country through which the road passes, with particular reference to its traffic-producing capacity, and in this direction makes a gratifying showing with reference to that portion of the line already in operation, as well as regarding that which is yet to be built. It is an interesting document, containing considerable valuable information, and will doubtless be of interest to anyone who may be concerned in the country through which the road is located as well as to the stockholders.

Paris to Mt. Pleasant.

Dispatches from Paris, Tex., report that the contract for grading the Paris & Mt. Pleasant Railroad has been let to M. Tansey of Shreveport, La. Construction will begin immediately, or as soon as the outfit can be assembled. It is said that nearly \$200,000 has been subscribed for the road in stock and bonuses, and \$200,000 more are to be raised. R. F. Scott is president of the railroad; N. H. Ragland, secretary, and H. P. Moberly, chief engineer. The route is about 50 miles long. Among others who are mentioned as interested are H. A. Wilson, E. S. Lilienstein, C. O. Lide, T. R. Caldwell, J. N. Badt, T. C. Hutchins, J. M. Burford, J. V. Moore, T. L. Denman and August Eikhoff, all of Mt. Pleasant, Tex.

Extension Contemplated.

Gordon P. Paine of Baltimore has been elected vice-president of the Union Springs & Northern Railway Co. of Alabama. This is a short line of railroad connecting Union Springs with Fort Davis, Ala., seven and one-half miles, on the Seaboard Air Line Railway. An extension is contemplated, but the officials are not ready to make any announcement concerning it. W. M. Blount of Union Springs, Ala., is president of the road.

Railroad Notes.

The Northern Texas Traction Co. has arranged for the double-tracking of 7200 feet of the Polytechnic College line in Fort Worth, Tex. The work will be carried out by the Stone & Webster Engineering Corporation.

The first freight train over the Carolina, Clinchfield & Ohio Railway has arrived at Spartanburg, S. C., from the Clinchfield coal region. It carried seven carloads of coal, which were distributed from Spartanburg to their destination. Passenger service has also begun.

TEXTILES

The Star Thread Mills.

The Star Thread Mills, James White, proprietor, Athens, Ga., plans additions to manufacturing facilities, including doubling capacity. This plant is now operating 7000 ring spindles, driven by water-power, on the production of cotton yarns. Mr. White, W. Y. Bryan and J. Y. Carithers are planning in this connection the construction of a water-power-electrical plant at Barnett Shoals, on the Oconee River. The plan contemplates the construction of a dam 50 feet high for developing 4000 horse-power to be transmitted by electricity for operating the Star plant and for lighting purposes.

The Weiss Hosiery Mill.

The Weiss Hosiery Mill of Cleveland, Tenn., has organized with C. H. Weiss, president, and P. B. Mayfield, secretary-treasurer. It will erect a brick building 50x150 feet, with a boiler and engine-room addition, and install 50 footers, 10 loopers, one sewing machine, dyeing equipment and steam-power plant. The daily output will be 250 dozen pairs of men and women's fine-gauge hosiery, with 75 operatives employed. This company was reported last month as incorporated with a capital stock of \$25,000.

Will Operate 800 Looms.

The Granite Manufacturing Co. of Marble Falls, Tex., will install cotton manufacturing machinery, as stated lately. It will have 800 looms for weaving ginghams, chambrays and madras, and contract for the entire equipment has been awarded to Whitted & White of Charlotte, N. C. The power will be electricity transmitted from the water-power-electrical plant of the Colorado River Power Co.

A \$250,000 Company Planned.

Asa G. Candler, Sr., and Asa G. Candler, Jr., Atlanta, Ga., have purchased the Witham Cotton Mills of Hartwell, Ga., at \$100,000. They plan the organization of a \$250,000 company to remove the plant to Atlanta and there increase from 6000 to 12,000 spindles. The equipment also includes 186 looms, dyeing and finishing machinery, steam-power plant, etc., for the production is sheeting, drills, satens, etc.

Meherrin Cotton Mills Co.

The Meherrin Cotton Mills Co. of Emporia, Va., has been incorporated with a capital stock of \$100,000 and the following officers: President, G. B. Wood; vice-president, W. R. Cato; secretary-treasurer, Pattie I. Wood.

The River Falls Mill.

The River Falls (N. C.) Cotton Mills Co., mentioned last week, has increased capital stock to \$250,000 and plans to build a 10,000-spindle mill. J. W. Menefee of Graham, N. C., is president.

The Roxboro (N. C.) Cotton Mills will build a steam-power plant, and has awarded contract for a 100-horse-power engine direct connected to a 75-kilowatt generator. Contract for the electrical machinery was awarded to the General Electric Co. of Schenectady, N. Y.

Chickasha Terminal.

The Chickasha Terminal Railway Co. is the name of a corporation which has been formed to build a terminal at Chickasha, Okla., for the Oklahoma Central Railway. Connections will be made with the Rock Island-Frisco systems. The officers and directors are Dorset Carter, president; C. E. Nelson, secretary; H. H. Fitzgerald, chief engineer, all at Purcell, Okla.

LUMBER

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

A Louisiana Development.

The MANUFACTURERS' RECORD has authentic information relative to the proposed development of timber lands in Sabine parish, Louisiana, by the Wyatt Lumber Co. of Wyatt, La. The company has acquired about 24,000 acres of timber, carrying approximately 150,000,000 feet of yellow pine and 60,000,000 feet of hardwoods. It is arranging to erect a single-band sawmill of 50,000 or 60,000 feet daily capacity, with drykiln and planing mill of like capacity, construction to begin about March 1. The plans also contemplate the construction of about 14 miles of railroad to facilitate the development. The lands are accessible to the Sabine River and the Kansas City Southern Railway, and it has not yet been determined whether the plant will be constructed with a view to using the Sabine River as a principal outlet, permitting the company to engage largely in the export trade, or build it near the Kansas City Southern Railway with a view to using the railroad and cutting the stumpage for interior trade. The company is prepared to receive proposals for equipment, etc., and will expend \$150,000 or more for the establishment of the plant. A. H. Henderson, treasurer and general manager of the company, will have charge of the construction of the railroad and plant. Other officers include F. A. Goodrich, president; J. W. Bennett, vice-president, and C. E. Henderson, secretary.

Will Establish Sawmill.

The MANUFACTURERS' RECORD has received authentic information relative to the plans of the Ragley-Saner Lumber Co. of Dallas, which recently succeeded the Ragley-McWilliams Lumber Co. and increased its capital stock from \$200,000 to \$300,000. The company will erect a double band sawmill of ordinary construction in Sabine county, Texas, and equip it for a daily capacity of 125,000 feet of yellow-pine lumber. No details have been determined as to the selection of an engineer, architect, building material or equipment, but communications may be addressed to John C. Saner, Dallas, Tex. Officers of the company include W. G. Ragley, president; J. B. Wilson, vice-president; John C. Saner, secretary, treasurer and manager.

Acquires Turpentine Rights.

Reports from Houston state that W. B. Gillican, president of the Gillican-Vizard Naval Stores Co. of New Orleans and the Texas Turpentine Co. of Remlig, Tex., with other interests, have acquired extensive turpentine rights in East Texas on large tracts of timber land of the Kirby Lumber Co. No announcement has been made as to the plans of the purchasers, but it is understood that a new company will be organized to be known as the Texas Turpentine Co., which will establish and operate turpentine plants and orchards at Sour Lake, Newton, Brownell and Village. The acreage is said to embrace an area of about 500,000 acres, the turpentine rights to accrue from year to year.

Good Building Record of Memphis.

A preliminary report by the Building Commissioner of Memphis indicates that \$16,515,604 has been expended within the city limits for building operations since January 1, 1906. This estimate is based upon the valuation submitted to the commissioner when permits were obtained, and do not include, as a rule, the cost of heating and lighting fixtures. A total of 10,023 buildings is represented in the valuation, of which \$7,436,000 was expended for fireproof and stone structures, \$2,500,000 for stone, brick and stone veneer residences and the remainder for frame dwellings, alterations and repairs.

The Louisell Lumber Co.

The Louisell Lumber Co. of Mobile, recently reported as purchasing a tract of timber land on Pearl River and intending to construct 20 miles of logging road and a 50-ton bridge to facilitate its development, advises the MANUFACTURERS' RECORD that the property consists of about 15,300 acres and contains approximately 200,000,000 feet of pine timber. The company owns two mills of 1,000,000 feet capacity each, which it will remove to the property to develop the timber. Its officers include William H. Louisell, president; T. M. Stevens, vice-president; William Van Heuvel, treasurer, and Cyril Louisell, secretary.

A \$500,000 Lumber and Export Company.

Articles of incorporation have been filed in New Orleans for the Southern Export & Lumber Co., with a capital stock of \$500,000, to manufacture and sell lumber, timber and forest products, etc. Its incorporators include Edwin de Longe of Chicago, W. D. Phillips and W. W. Meeks. It is announced that the company has purchased about 18,000 acres of timber in Pointe Coupee parish from the Capitola Land Co. of Chicago, and will develop this, engaging also in an extensive export trade. After the timber has been removed it is stated that the Capitola Land Co. will exploit the land for colonization.

Tampa's Shipment for November.

Lumber shipment from Tampa during November, both export and domestic, totaled 3,914,699 feet, an increase over shipments during October of 666,758 feet. Of the total, 3,103,553 feet were domestic shipments.

FOREIGN LETTERS

The MANUFACTURERS' RECORD is so widely read in foreign countries that we are in constant receipt of many letters from all parts of the world. Some of these letters indicate the disposition of foreigners to buy American goods, and are therefore of interest to our readers.

Wanted for Turkey's Trade.

G. Z. Garabedian, 1005 South Wright street, Champaign, Ill., writes the MANUFACTURERS' RECORD:

"American manufacturers and export houses in general hardware, iron sheets and pipes, leather and skins, margarine and other oils, desiring to establish trade in Turkey, are requested to communicate (sending catalogues) with me."

Representatives in Argentine.

Gilchrist & Co., Reconquista 484, Buenos Aires, Argentine, write the MANUFACTURERS' RECORD:

"We have been established for over 30 years, and during this time we have been representing the Valvoline Oil Co. of New York and several other large concerns of your country, and we are anxious to increase our business and get new connections."

Mexico Wants Agricultural Implements.

Gonzales, Rodriguez & Co., Apartado Postal No. 91, Hermosillo, Sonora, Mexico, write the MANUFACTURERS' RECORD:

"At the present time we are investigating all kinds of agricultural implements, and will be glad to have space in your MANUFACTURERS' RECORD so that we may receive quotations."

MINING

Mineral Production, 1908.

One of the most striking exhibits of the far-reaching results of the financial depression of the latter part of 1907 is made in the invaluable summary of the mineral production of the United States in 1908, compiled for the United States Geological Survey by Dr. William Taylor Thom.

The varied character of the units of measurement employed in the mineral industry makes it impossible to compare the outputs of the several minerals, except in the value of the products. Dr. Thom points out that the exact figures for 1908 are \$1,595,670,186, as compared with \$2,071,607,964 in 1907, with \$1,904,007,034 in 1906, with \$1,625,135,835 in 1905, and with \$1,363,072,345 in 1904; a loss in 1908 from 1907 of \$475,937,778, or 22.97 per cent.; from 1906 of \$308,336,848, or 16.19 per cent.; from 1905 of \$29,465,649, or 1.81 per cent., and an increase over 1904 of \$232,587,841, or 17.06 per cent.

As heretofore, iron and coal are the most important of our mineral products. The value of iron in 1908 was \$254,321,000; the value of coal was \$532,314,117. The fuels—coal, natural gas and petroleum—decreased from \$789,128,046 in 1907 to \$716,660,749 in 1908, a loss of \$72,467,297, or 9.18 per cent. Anthracite coal showed a decrease in value of \$5,405,207, from \$163,584,056 in 1907 to \$158,178,849 in 1908. The decrease in value of the bituminous coal output from 1907 was \$77,079,574, from \$451,214,842 in 1907 to \$374,135,268 in 1908, a loss or combined decrease in the value of coal of \$82,484,781, or 13.42 per cent.

The loss of \$475,937,778 in the total value of our mineral production is due to losses in both metallic and non-metallic products, the metallic products showing a decrease from \$903,802,244 in 1907 to \$549,923,116 in 1908, a loss of \$353,879,128, and the non-metallic products showing a decrease from \$1,167,705,720 in 1907 to \$1,045,497,070 in 1908, a loss of \$122,208,650. To these products should be added estimated unspecified products, including cadmium, nickel, cobalt, bismuth and other mineral products, valued at \$250,000, making a total mineral production for 1908 of \$1,595,670,186.

Will Develop Two Mines.

With reference to the plans of the Colonial Coal & Coke Co. of Prestonsburg, Ky., for the development of coal lands, the MANUFACTURERS' RECORD is advised that the company has begun the construction of a mining plant, and will develop the coal underlying a tract of 1000 acres. It will open two mines to be equipped with electrical mining machinery, shaker-screen tippie and other modern facilities, bids for which are now being received. There are said to be two seams of coal underlying the property, which measure four and five feet in thickness. They are known as the Yellow Jacket and Middle Creek coals, and are considered among the best for domestic purposes. The company is capitalized at \$100,000, and will develop its mines to a capacity of 500 tons per day, handling the product from both mines over the same tippie. Its officers are C. W. Evans, Lookout, Ky., president; E. G. Kaercher, Pottsville, Pa., vice-president, and W. G. Stoffer, Minersville, Pa., secretary. W. T. Griffiths of Pikeville, Ky., is the engineer in charge of construction.

Purchase 28,000 Acres.

Regarding recent reports that William A. Ohley of Charleston, W. Va.; O. S. McKinney of Fairmont and associates have purchased 28,000 acres of coal and timber lands in Virginia for development,

the MANUFACTURERS' RECORD is informed that these interests have purchased a tract of coal and timber land from the Buchanan Coal & Coke Co. of Richmond, Va., approximating 28,000 acres. The property is located on the headwaters of Levisa Fork, in Buchanan county, Virginia, one-third of it, which is well timbered, being purchased in fee, and only the mining rights being transferred on the remainder. An early development of the property is contemplated, but no definite details have been determined.

October Coal Shipments.

Coal shipments from the Kanawha field during October amounted to 627,470 tons, as compared with 576,030 tons for October, 1908. In the New River field total shipments amounted to 664,440 tons during October, as against a total of 507,850 tons during the same month in 1908. October shipments from the Norfolk & Western district included 761,333 tons from the Pocahontas field, 123,367 tons from the Tug River field, 154,847 tons from the Thacker field and 62,512 tons from the Kenova field. The tonnage consumed at the tipples amounted to 41,141 tons, and the total output of the field to 1,143,200 tons. The coke production in the Pocahontas field was 240,453 tons.

Big Coal Deal Pending.

Reports state that New York capitalists are negotiating for 100,000 acres of coal lands in the vicinity of Sturgis, Ky., with a view to extensive development. The plans contemplated are said to embrace the opening of mines of large capacity and constructing coke ovens. R. L. Coffey, president of the Crittenden Coal & Coke Co. of Sturgis, is reported as negotiating the sale.

West Virginia Coal Mining Institute.

At a meeting of the West Virginia Coal Mining Institute at Huntington last week the following officers were elected for the ensuing year: President, J. B. Hanford, Morgantown; vice-presidents, Frank Haas, Fairmont; Neil Robinson, Charleston; F. H. Palmer, Olcott; James Virgin, Plymouth, and Paul Hardy, Holden; secretary-treasurer, E. B. Day, Pittsburg.

OFFERED BY GRAFTON.

Novel Methods of Inducing Incoming of Industries.

[Special Cor. Manufacturers' Record.]
Grafton, W. Va., December 7.

A novel feature of the work of the Grafton Board of Trade is the erection of four large signboards at each of the four railroad entrances to this town. On each of these boards will be displayed in large lettering the fact that Grafton will offer free factory sites to concerns that will build their plants here, and in addition that each plant will be exempt from taxation for five years.

There is a splendid opportunity here for any of the following enterprises: Shirt factory, overall factory, box factory, chair factory, wagon and buggy factory, machine shop and mine-car plant.

The Baltimore & Ohio Railroad will, it is stated, erect a handsome station to cost between \$75,000 and \$100,000, and otherwise improve its property here to the extent of \$650,000.

Mr. W. R. Williams, secretary Board of Trade, will be glad to furnish detailed information to manufacturers who will write for such data. MILES C. SHOREY.

The steamer Ocean sailed this week from Sparrows Point, Md., with 6000 tons of 75-pound rails, a part of the 12,000-ton order given the Maryland Steel Co. by the National Railways of Mexico.

MECHANICAL

The Hill Bituminous Gas Producer.

The Hill-Hupfel Engineering Co., Inc., 30 Church street, New York, has developed a producer-gas plant to gasify bituminous coal, lignite or peat, and even low-grade fuels, such as anthracite screenings or slack bituminous coal. Describing the equipment, the company says:

"The generator combines the good features of a down-draft producer with the simplicity of an ordinary up-draft producer, and in addition has the advantages of being mechanically fed, automatically stoked and automatically relieved of its ashes. It consists of a steel shell, the upper section of which is mounted on four cast-iron legs; the bottom section, supported by four grooved rollers, revolves on a track, and is driven by worm and gear. The producer is lined with a 12-inch fire-brick lining, back of which is one-half inch of mineral wool to allow for expansion and contraction. The top is cast iron, water-cooled, and the bottom is of the open water-sealed type.

"Through the center of the producer, and supported by a water-cooled casting, is a dividing wall, on one side of which the coal is admitted to a distilling chamber, and from the other side is taken the gas outlet. The dividing wall is so arranged that there is a greater area at the bottom of the distilling chamber, allowing the coal to feed freely and providing ample room for expansion during the process of coking.

"A mechanically-operated hopper is mounted above the distilling chamber, to which connections can be made from the coal storage bin. Between the hopper and the top of the producer is mounted an induction steam blower. The bottom of the producer is a stationary iron tuyere. Another induction steam blower is attached to the outer end of the tuyere pipe. The blowers are operated by a jet of steam, which carries in with it a column of air. They can be adjusted to take into the generator any required mixture of steam and air or to admit steam only. Fuel is fed from the hopper into the distilling chamber by the mechanical feed shown in the neck of the hopper, maintaining a proper height of the burning mass in the distilling chamber.

"The current of air and steam from the upper blower carries the gases downward through the incandescent body of the fuel zone at the bottom of the dividing wall, where the heavy hydrocarbons are converted into a fixed gas, which mingles with the free hydrogen and carbon-monoxide produced by the dissociation of the steam and partial combustion of the fuel produced by the oxygen of the air admitted. In this heated zone the tar is largely eliminated, and the soot is mostly deposited or filtered out. The downward current of gases is met and joined at the bottom of the dividing wall by an upward current from the tuyere, produced by the blower attached. The proportions of air and steam from this blower can be adjusted to produce a gas nearly similar to that produced from the upper part of the burning pile, or steam alone can be admitted from below, producing a gas rich in hydrogen, while the temperature of the mass is maintained by the upper blast.

"The revolving lower section of the shell keeps the fire constantly stirred, breaks up cinders and prevents clinkers forming, and the ashes are forced out through the water in the seal.

"From the generator the gases pass to the down-comer.

"The down-comer is made of one-quarter-inch steel, and is lined with three-inch fire-brick. The bottom rests in a water seal, and consists of a cast-iron box with

a projecting arm, so that when the plant is not running water is admitted, which provides a seal or a valve, shutting off the scrubber from the generator. At the top of the down-comer a mushroom valve, provided with a saucer valve cap, is placed so that by raising this valve to the purge stack connections are made. Very often, instead of allowing the gases to escape through the purge stack, they are piped to a boiler and burned under it. This applies to plants where it is necessary to keep up steam pressure for operating fire pumps at night and Sundays, and at the same time allows the fire in the generator to be kept at a proper height. From the down-comer the gases are conducted to the scrubber, where the gas is brought in contact with the water, which is admitted in the top through a series of sprinklers.

"The scrubber consists of a steel shell,

tar is provided, so that by closing the valve at the top of the tar tank and admitting live steam the tar is forced from the collecting tank to the tar storage tank mounted above the boiler.

"The tar storage tank on top of the boiler is provided with a steam-heating coil and the tar is fed by gravity to the tar burner, where under steam pressure it is atomized and burned for firing the boiler. The boiler is also provided with a set of grate bars, so that the plant may be started firing the boiler with coal. In such places where steam pressure must be maintained at all times for fire protection, etc., a connection is provided, so that the purge gases from the producer at night and Sunday are carried to the boiler and burned under it.

"The gas leaves the scrubber cooled, and is conducted to the rotary washer through a wrought-iron pipe. The fittings are tees,

water are forced through the stationary iron rings, which breaks up the water into a fine mist and allows the gas to expand. At the top of this section a second set of wheels picks up the gases and water is admitted, so that the water and gas is again forced through the stationary deflecting iron rings and allowed to expand before being forced through the third section of rotating wheels. The gas is then delivered under pressure to the dry scrubber. This pressure is maintained constant by a regulator mounted over the washer and operating on a governor attached to the turbine or electric motor driving the washer.

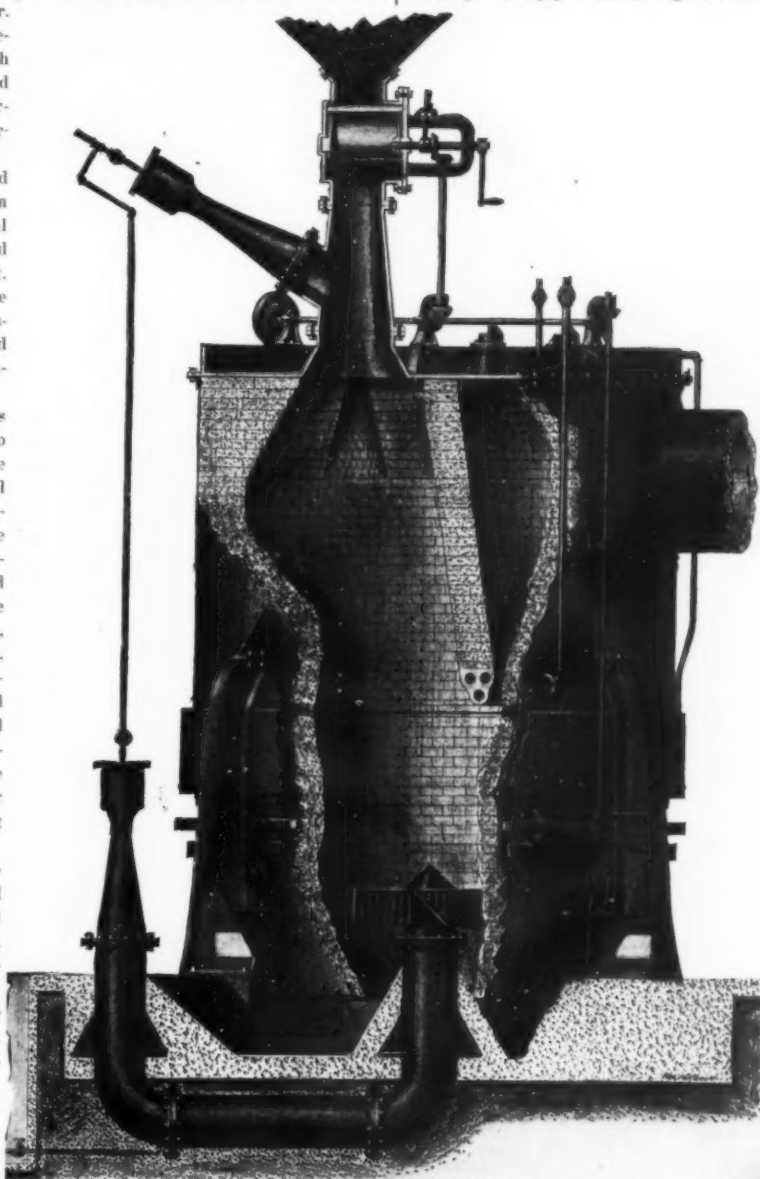
"The governor on the turbine maintains a constant speed at any point between the minimum speed required to clean the gas and the maximum speed at which the turbine is designed to operate. An adjustable weight is attached to the top of the regulator, so that any pressure desired from 3 to 12 inch water gauge can be maintained on the gas mains. The steam from the turbine is exhausted into a receiving tank provided with a bypass and reducing valve, and the exhausted steam is piped to the induction blowers on the producer and is used for gas-making. As the load on the turbine increases the back pressure and quantity of steam increases, thereby increasing the steam and air pressure on the producer. The speed of the steam turbine increases or decreases with the load, and as this turbine also drives the shaft operating the generator and feed, the amount of fuel admitted to the producer is in direct proportion to the amount of gas being made.

"The plant is automatic, and can be adjusted to any load. The three principal features governing the operation of the plant are accomplished automatically and mechanically, viz., the feeding of coal, the rotation of the producer and the adjustment of air and steam. This, it is claimed, insures a uniform quality of gas at all times and the highest economy in operation, as the plant only makes gas in proportion to the load.

"The dry scrubber consists of a circular tank, made of one-quarter-inch steel and provided with two perforated plates, between which there is a filling of excelsior, which has been saturated with oil, so that the gas in passing through this excelsior will deposit any particles of soot, dust or similar foreign substance on the excelsior. To facilitate easy access to the dry scrubber a water-sealed top is provided, which is raised or lowered by a block and chain. The bottom of the dry scrubber is provided with a drain, so that any condensation is piped to the sewer. For such plants the company's standard cast-iron economizer is used, with an automatic water regulator such as furnished with the company's anthracite plants. This economizer generates the necessary steam and also preheats the air. The economizer is provided with an automatic regulator, insuring a uniform quality of gas.

"The plant as above described is the pressure type; however, there are places where the plant must be installed in buildings which will not permit the pressure-type producer, and to meet the demand for such apparatus these plants are built to operate on the suction principle. The washer in this case, while of the same general design, is provided with a larger set of inner wheels, which act as a exhauster.

"These plants are designed in sizes from 200 to 2000 horse-power in single units. For larger size equipment two or more generators are used. The one cooling apparatus, washer, etc., is sufficient, for, unlike other types, the washer can be operated continuously and is so simple in construction that there is little likelihood of shut downs. This plant as a whole when



THE HILL BITUMINOUS GAS PRODUCER.

made of one-quarter-inch sheet steel properly calked and provided with a canopy hood at the bottom and water sprinklers at the top. Three clean-out doors are located at different heights, and the scrubber is set in a water-sealed pit, the bottom of which is pitched toward the tar-collecting tank. Connections from the top of the scrubber to rotary washers are made of standard wrought-iron pipe, and fittings are arranged with clean-out doors, so that any deposit of tar could be easily removed.

"Between the wet scrubber and the rotary washer—a tar-collecting tank is provided. Through the drain from the water-sealed pits of the scrubber and washer connections are made so that the tar is collected in a vertical tank with conical top and valve. A steam coil for heating the

with one side blank, so that they can be easily removed for inspection and cleaning.

"The gas from the generator is practically cleaned before leaving the producer, but to insure satisfactory operation the rotary washer is furnished with each clean gas plant. This washer is of the three-stage type, consisting of three rotary wheels and three stationary compartments, each compartment being provided with three sets of stationary cast-iron rings, and with water legs or drains, so that the water, tar and soot are drained in the pit below the washer. The gas is admitted through a pipe, sealed at the base with water and connected to the center set of wheels in the washer, at which point there is a partial suction. At this point water is sprayed upon the wheel and the gas and

operating on a good quality of bituminous coal is reported to have an efficiency of 75 per cent., which includes all the auxiliary apparatus. The company is prepared to furnish these producers, with engines and electrical equipments, making a complete plant."

A Big Conveyor Belt.

An accompanying illustration is a view of a big belt manufactured to special order



A BIG CONVEYOR BELT.

by the New Jersey Car Spring & Rubber Co. of Jersey City, N. J. The belt is 660 feet long, 36 inches wide, eight ply, and weighs 8635 pounds. It was inspected at the company's plant by a number of people interested in belting, and is understood to have been acknowledged to be a most perfect example of a one-piece conveyor belt.

Machine for Stringing Tobacco Bags.

In smoking tobacco manufacturing plants, where the tobacco is packed in bags, the strings in the mouth end of the bags to close them have been placed by hand. As this method is not only slow, but costly, efforts have been made to devise machines that would automatically put the strings in the bags.

Recognizing the demand for a machine of this character, John T. Dalton and Walter H. Crowell, both of Virgilina, Va., after devoting the past four years to the work, have designed and constructed a machine to put strings in tobacco bags.

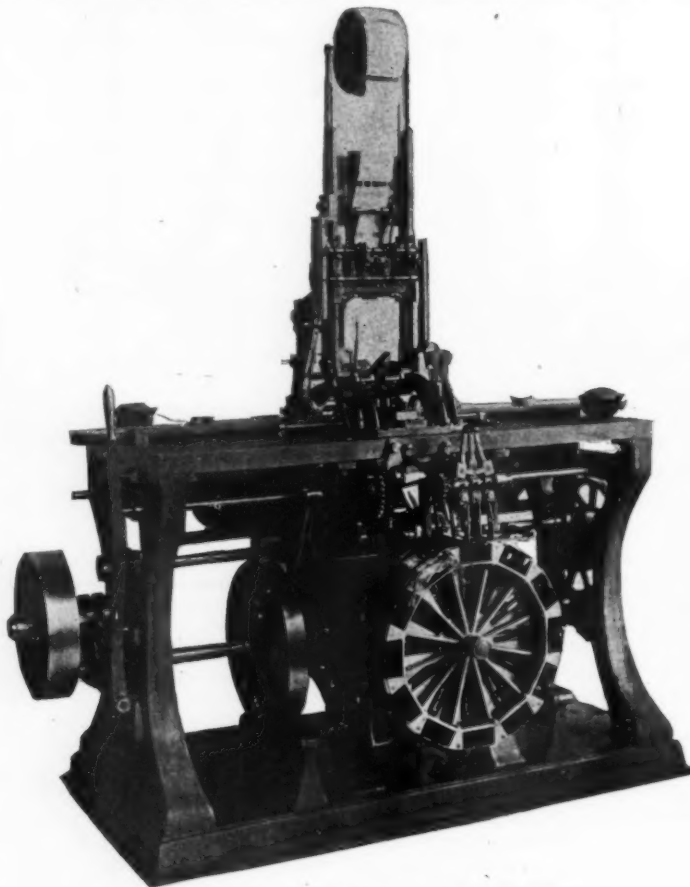
Their present machine, an illustration of which is presented herewith, was especially designed for small 1 and 1½-ounce bags, although machines can be built along the same line to string any size bag desired.

The machine is automatic throughout, leaving no work depending upon the skill of the operator. All the operator has to do is to keep filled the reel which feeds the bags to the machine; in fact, the machines are so simple in their action that one operator can run from two to four machines. The capacity of the machine shown is from 10,000 to 15,000 bags per 10 hours.

The cotton bags are placed in the machine on a reel containing any quantity desired. This reel is shown at the top of the illustration. The bags are joined together by small threads just as they come from the bag-making department. The machine first cuts them apart as they are

fed into it. The threads for closing the bag are then run through a small hem at the mouth, and as soon as this is done the knots are tied in the loose ends of the threads automatically. Up to and during this operation the bags are inside out, but as soon as the strings are tied the machines turn the bags right side out, at the same time taking them off the machine and carrying them to a packing and counting mechanism, where the bags are auto-

matically packed in stacks of 25 each in a circular device shown in the illustration, and which contains 12 compartments, each holding 25 bags. By this arrange-



MACHINE FOR STRINGING TOBACCO BAGS.

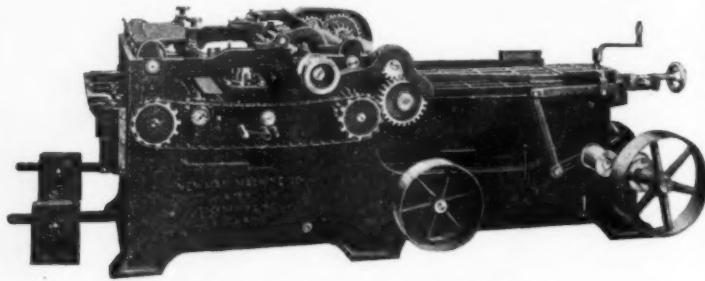
ment the bags are removed from the machine and packed in convenient form until ready to be filled. This mechanism can be arranged to hold any number of bags

desired, and it is not absolutely necessary for the bags to be removed from it by hand, as the machine automatically ejects them if they are not removed in sufficient time to provide a storage department for the bags as they come from the machine.

No. 8 Planer, Matcher and Molder.

The Newman Machine Co. of Greensboro, N. C., refers as follows to its No. 8 planer, matcher and molder:

"This new combined machine differs from any other machine of this kind. The under cutterhead is on the inside of the outfeeding rolls, and by this method the lumber is held very rigidly and to its place,



NO. 8 PLANER, MATCHER AND MOLDER.

and the machine will feel the last piece of lumber entirely out, which we consider a very strong feature of our machine.

"The shears, or bedplate, are very heavy and strong, and run the entire length of the machine, as shown in cut. The bed is supported by gibbes at the end of the machine, instead of at the center. The gibbes are on the outside of the frame, which makes them four feet apart. All pressure of the rolls is inside of the gibbes, which makes the bed much more rigid than if supported by narrow ways at the center, as in other machines.

"The cutterheads, or cylinders, are forged steel, slotted on four sides for bolts. The top cylinder is driven by two five-inch

to enable the operator to keep the cylinder in perfect line with the table.

"The four feed rolls are six inches in diameter, with long and heavy journals. The top infeeding roll is fluted, and the two infeeding rolls are driven with a heavy set of gears. The outfeeding rolls are driven by corresponding infeeding rolls independently of each other, with a heavy chain, which insures a powerful feed. The machine has two speeds of feed, viz., 30 and 50 feet per minute.

"The pressure bars and chip-breaker for the top head are adjustable, which makes it possible to run beading, molding and German and novelty siding without

removing the straight knives. The pressure shoe over the under cutter is also adjustable, and by loosening one nut can be instantly thrown out of the way for sharpening or removing the knives. The bedplate in the front and the rear of the under cutter is adjustable.

"The matcher spindles or side head stocks are both adjusted independently of each other, and can be moved across the table to any position, which prevents the lumber wearing a hollow place in the bed. The heads are provided with a weighted chip-breaker and guide to hold the lumber down on the bed for matching, flooring and ceiling. The bed is raised and lowered by a crank at the rear left-hand corner, convenient to the operator. The two large screws for raising and lowering the bed are mounted on ball bearings.

"We furnish with each machine two 24-inch knives on each of the top and bottom heads, together with a complete set of steel bolts with case-hardened nuts for all the slots; one pair solid Shimer matcher heads, with one full set of bits or one pair four-slotted jointer heads with knives and bolts; one pair of beading bits and necessary wrenches.

"The machine planes two sides 24 inches wide and 8 inches thick, joints 6 inches thick, and will match 15 inches wide. The tight and loose pulleys are 12x8 inches, 950 R. P. M. Weight, 5000 pounds."

See accompanying illustration of the machine.

McCalls Ferry Power Co.

Wm. M. Barnum of New York telegraphs the MANUFACTURERS' RECORD confirming the report that he has purchased the property of the McCalls Ferry Power Co., which is constructing a water-power-electrical plant at McCalls Ferry, on the Susquehanna River, Pennsylvania. He advises that the committee is acting under a plan of reorganization unanimously approved by the bondholders. The company's offices are at 24 Exchange Place, New York.

A 1500-Ton Sugar Refinery.

The Le Teche Sugar Co. of Arnaudville, La., has been incorporated with a capital stock of \$1,000,000 and proposes to erect a 1500-ton sugar refinery, with 10 to 15 miles of railway. A. C. Durio is president; Dan P. Martin, vice-president; J. M. Oliver, secretary.

Construction Department

TO OUR READERS!

In order to understand and follow up properly the Construction Department items, please bear in mind the following statements:

EXPLANATORY

The MANUFACTURERS' RECORD seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the MANUFACTURERS' RECORD.

ADDRESS FULLY

To insure prompt delivery of communications about items reported in these columns, the name of one or more incorporators of a newly incorporated enterprise should be shown on the letter addressed to that town, or to the town of the individual sought, as may be shown in the item, as sometimes a communication merely addressed in the corporate or official name of a newly established company or enterprise cannot be delivered by the postmaster. This will help to insure prompt delivery of your communication, although it is inevitable that some failures on the part of the postal authorities to deliver mail to new concerns will occur.

WRITE DIRECT

It is suggested to advertisers and readers that in communicating with individuals and firms reported in these columns, a letter written specifically about the matter reported is likely to receive quicker and surer attention than a mere circular.

The Daily Bulletin of the Manufacturers' Record is published every business day in the year for the purpose of giving the earliest possible news in regard to new industrial, railroad and financial enterprises organized in the South. It is invaluable to contractors, manufacturers, engineers and all others who want to get in touch at the earliest moment with new undertakings or the enlargement of established enterprises. The subscription price is \$25 a year. All advertising contracts in the Manufacturers' Record extending over a period of three months include a subscription for the length of time of the contract to the Daily Bulletin.

BRIDGES, CULVERTS, VIADUCTS

Ark., Little Rock.—City will construct concrete bridge over Swaggerty Branch on High St.; \$5000 appropriated; E. A. Kingsley, City Engineer.

Fla., McDavid.—Escambia and Santa Rosa counties will construct steel bridge across Escambia River at McDavid. Address Commissioners of Escambia County, Pensacola, Fla., or of Santa Rosa county at Milton, Fla.

Fla., Tampa.—Hillsboro County Commissioners awarded contract to Roanoke Bridge Co., Roanoke, Va., at \$6350 to construct steel bridge across Hillsboro River. (Recently mentioned.)

Ga., Elberton.—Elbert county contemplates construction of bridge across Broad River. Address County Commissioners.

Ga., Savannah.—City and Atlantic Coast Railroad, E. B. Pleasant, chief engineer, Wilmington, N. C., has authorized changes in plans previously proposed to facilitate drainage in connection with construction of Henry St. viaduct; railroad tracks are to be raised five feet, making lesser grade for approaches on east and west sides on subway; total cost estimated from \$30,000 to \$35,000, to be shared equally by city and railroad. (Previously mentioned.)

La., New Orleans.—W. J. Hardee, City En-

gineer, recommended to committee on finance acceptance of following bids: Penn Bridge Co., Beaver Falls, Pa., at \$14,980 for repair of drawbridge over the New Basin Canal on axis of Canal St., and Mulr & Fromberg at \$1800 for removal of old bridge that spanned 17th-street canal on Carrollton Ave. and re-erection of same over Claiborne-street canal.

La., New Iberia.—New Iberia, St. Martin's & Northern Railroad, R. J. Lockwood, chief engineer, New Iberia, awarded subcontract to Jewett Construction Co., Springfield, Mo., to construct bridges and buildings on railroad being constructed from Port Barre, La., to New Iberia, distance of 48 miles.

Miss., Vicksburg.—Vicksburg, Shreveport & Pacific Railway, D. D. Curran, general manager, New Orleans, La., and other roads contemplates construction of viaduct over Cherry St. railroad crossing.

Mo., St. Louis.—Terminal Association agrees, it is reported, to construct two viaducts at once and two within three years.

N. C., Asheville.—Buncombe County Commissioners practically awarded contract to C. B. Clark & Co., 10 East Lexington St., Baltimore, Md., at \$22,530, for construction of West Asheville bridge previously noted; reinforced concrete structure, 930 feet long, 30 feet wide, with 5-foot sidewalk attached; to carry single-track car line, with passing track in center.

S. C., Anderson.—Charleston & Western Carolina Railway, J. R. Kenly, general manager, Wilmington, N. C., awarded contract to Phoenix Bridge Co., Philadelphia, Pa., to construct two bridges, one across Rocky River and other across Little River; cost about \$20,000.

Tex., Dallas.—Dallas County Commissioners will open bids January 15 (instead of January 5, as lately stated) for construction of steel highway bridge and viaduct over Trinity River; J. F. Witt, County Engineer. (See "Machinery Wanted.")

Va., Portsmouth.—Street Committee provided in new paving estimate for construction of concrete bridges on 1st St. causeway.

W. Va., Wheeling.—Board of Control has awarded contracts for construction of superstructure of Market St. bridge: American Bridge Co., 30 Church St., New York, at \$12,875, for fabricating material, f. o. b. Wheeling, and to Eder Construction Co., Pittsburgh, Pa., at \$4950, for erecting; Herman Laub, Pittsburgh, Pa., is consulting engineer. (Recently mentioned.)

CANNING AND PACKING PLANTS

Tex., Galveston.—M. J. Hogan and associates contemplates establishment of plant for canning oysters, crabs, etc.; probably \$4000 capital stock.

CLAYWORKING PLANTS

D. C., Washington.—Tile.—International Klinch Tile Corporation, 1320 New York Ave. (recently reported incorporated under Alexandria, Va., with \$200,000 capital stock), will manufacture opalescent glass product; at present company will provide molds and have product made by glass manufacturers; Burton G. Smith, president; Alfred Du Montier, vice-president; Eugene H. Taggart, secretary-treasurer; Andrew D. Porter, manager.

Ga., Columbus.—Sewer Pipe.—J. E. Minter, Mercer Morris and R. B. Small, all of Macon, Ga., are organizing company with \$50,000 capital stock to establish plant for manufacturing sewer pipe.

La., Baldwin.—Bricks.—J. B. Sewell Brick Factory & Trading Co., Ltd., incorporated with \$5000 capital stock; F. C. Viguierie, president; Dolph Parro, vice-president; J. D. Morris, secretary-treasurer.

Okla., Oklahoma City.—Bricks.—Janesville Granite, Brick & Stone Co., Janesville, Wis., purchased 10-acre site and will establish \$75,000 plant for manufacturing pressed facing, enameled and common building brick; capacity, 40,000 bricks daily; R. L. Corley will be manager.

COAL MINES AND COKE OVENS

Ala., Birmingham.—Block Carbon Coal Co. incorporated with \$20,000 capital stock; R. K. Edwards, president and treasurer; William C. McFarlin, vice-president, general manager and secretary.

Ky., Ashland.—Floyd Coal Co. incorporated

with \$25,000 capital stock by John F. Hager, B. F. Whitman, Gerald F. Hager, James G. Serey and others.

Ky., Middlesboro.—Dominion Coal Co., Burke H. Keney, general manager, increased capital stock from \$75,000 to \$500,000; leased 2000 acres of coal land and will develop.

Ky., Rlm.—Continental Coal Corporation, 913 James Bldg., Chattanooga, Tenn., is proceeding with proposed improvements, including installation of electric plant for power and lighting; cost reported as \$50,000.

Ky., Prestonsburg.—Colonial Coal & Coke Co. has begun proposed construction; will equip mine with electric machinery, shaker screen tipples, etc.; contemplated daily output after development (two mines), 500 tons; now receiving bids on machinery and equipment; capital stock \$100,000; C. W. Evans, Lookout, Ky., president; E. G. Kaercher, Pottsville, Pa., vice-president; W. G. Stoffer, Minersville, Pa., secretary; W. T. Griffiths, engineer in charge, Pikeville, Ky.; main office, Prestonsburg. (See "Machinery Wanted.")

Ky., Sturgis.—New York capitalists are negotiating for 100,000 acres of coal lands with view to development; plan opening mines of large capacity and constructing coke ovens; R. L. Coffy, president Crittenden Coal & Coke Co., Sturgis, is negotiating sale.

Va., Buchanan County.—Wm. A. Ohley, Kanawha Valley Bank Bldg., Charleston, W. Va., advises that no definite plans have yet been made for development of 28,000 acres coal and timber land recently reported purchased by Mr. Ohley, O. S. McKinney of Fairmont, W. Va., and others; land is on headwaters of Levisa Fork, in Buchanan county; early development contemplated.

Va., Kookee.—Kookee Consolidated Coke Co. will increase use of waste heat from ovens and enlarge existing plant about 100 per cent.; main office, 2 Rector St., New York.

Va., Manassas.—Pennvir Coal, Oil & Gas Co., People's National Bank Bldg., will drill for coal. (See "Gas and Oil Developments.")

W. Va., Chapmanville.—Guyan Valley Coal, Land & Lumber Co. (recently reported incorporated with \$300,000 capital stock) contemplates development of timber and coal; has about 1600 acres coal land and 3000 acres virgin timber in Chapmanville district of Logan county; contemplates operation by spring; will probably expend \$50,000 for machinery, tipples, etc.; principal office, 701 American Trust Bldg., Cleveland, Ohio; H. F. MacLane, general manager.

W. Va., Fairmont.—Farmington Coal & Coke Co. incorporated with \$300,000 capital stock by B. P. Porter, Cleveland, Ohio; W. P. Ely, E. L. Denny, L. M. Waddell and Tusco Morris, all of Waynesburg, Pa.

W. Va., Hiorra.—Newburg Coke Co., main office, Uniontown, Pa., will develop coal properties recently noted purchased; capital stock \$100,000; officers are W. A. Stone, A. P. Austin, Wm. Hawkins and Geo. H. Bortz; company contemplates equipping mine with electric haulage.

W. Va., Monongah.—Consolidation Coal Co., Continental Bldg., Baltimore, Md., will install \$60,000 washery; George T. Watson, Fairmont, W. Va., is manager West Virginia division.

CONCRETE AND CEMENT PLANTS

Okla., Okene.—Southwest Cement Co. incorporated with \$50,000 capital stock by T. J. Connelly, J. H. McCallum and E. E. Cressler.

COTTON COMPRESSES AND GINS

Ga., Woodville.—Durham & McWhorter will erect gin; machinery purchased.

N. C., Aurora.—W. T. Hudnell's cotton gin, recently reported burned, was but slightly damaged; no rebuilding.

Okla., Hugo.—C. L. Webb purchased round-bale gin; will remodel and convert into square-bale gin.

COTTONSEED-OIL MILLS

Ga., Americus.—D. W. Ebaugh and associates of Greenville, S. C., purchased Arthur Rylander plantation, 2500 acres of land; will continue farming and establish cotton-oil mill.

Ky., Hickman.—Richmond & Bond Company, main office, Chattanooga, Tenn., will

rebuild cottonseed-oil mill recently reported burned; loss \$100,000.

N. C., Salisbury.—Arey Oil & Fertilizer Co. organized by D. L. Arey, W. B. Strachan and others of Salisbury and J. A. Sossamon of Dunn, N. C.; will erect three-press cotton-oil mill. Address Mr. Sossamon. (Previously noted.)

Tex., Port Arthur.—Port Arthur Export Co. contemplates erection of cottonseed-oil mill; definite plans not yet made. (Recently noted.)

DRAINAGE AND IRRIGATION SYSTEMS

La., Millikens Bend.—Abbott Bros., Crowley, La., contemplate construction of canal and pumping plant in Madison parish; capacity of pumping plant 30,000 gallons per minute. (See "Machinery Wanted.")

La., New Orleans.—C. D. Gondron, Belle Helene, La., is chairman of committee in charge of preliminary arrangements relative to organization of drainage district in New River country, Ascension parish.

Miss., Greenwood.—City will issue \$20,000 of bonds for drainage purposes. Address The Mayor.

Tenn., Humboldt.—Humboldt-Dyersburg Drainage Association has organized to create drainage district of Middle Forked Deer River; contemplates appointment of engineer in April to make surveys; C. H. Ferrell, chairman; C. H. Fox, treasurer; M. A. Chambers, secretary.

Tex., Beaumont.—Spindletop Canal & Irrigation Co. incorporated with \$5000 capital stock by W. V. McFadden, L. W. Houk, P. H. Weiss and others.

Tex., Brownsville.—Drainage District No. 1 of Cameron county voted issuance of \$204,000 of bonds for drainage. Address Cameron County Commissioners.

Tex., Galveston.—Lone Star Canal Co. contemplates constructing dam at mouth of Turtle Bay to prevent entrance of salt water.

Tex., Houston.—Drainage District No. 3 defeated issuance of \$235,000 of bonds for drainage system. Address County Commissioners. (Noted in October.)

Tex., Port Arthur.—Port Arthur Nederland Drainage District will vote January 14 on issuance of \$150,000 or bonds for drainage improvements. Address Jefferson County Commissioners, Beaumont, Tex. (Previously mentioned.)

Tex., Presidio.—Polvo Irrigation Co. incorporated with \$3000 capital stock by Francisco J. Alvarado, Mateo Carrasco and Z. Madrid.

ELECTRIC-LIGHT AND POWER PLANTS

Ala., Mobile.—Mobile Street Railway will not make improvements to plant. (Recently incorrectly reported.)

Ark., Little Rock.—City will construct electric-light plant, and has engaged J. F. Jackson of Westinghouse Electrical Co., Pittsburgh, Pa., to furnish estimate of cost; E. A. Kingsley, City Engineer. (Lately mentioned.)

Ark., Paragould.—Crystal Light & Ice Co. has secured 29-year franchise and will expend \$20,000 in improvements to lighting plant.

Ga., Athens.—James White, W. F. Bryan, J. Y. Carithers and associates plan construction of water-power-electrical plant at Barnett Shoals on Oconee River; development of 4000 horse-power for transmission by electricity; dam to be 50 feet high; estimated cost of construction and equipment, \$250,000; engineer in charge, C. D. Flanagan.

Ga., Clarksville.—Clarkburg Railway Co. contemplates, it is reported, enlarging power plant and installing turbine unit.

Ga., Senola.—W. H. Baggary, J. A. McKnight, H. L. Ware and others are organizing company and will petition City Council for electric-light franchise.

Ky., Bowling Green.—R. W. Lynch, 1029 Center St., contemplates construction of electric-light plant in city of 12,000 inhabitants.

Ky., Lexington.—Siebert-Herndon Electric Co. incorporated with \$10,000 capital stock by F. O. Siebert, Lexington; J. W. Thacker, J. P. Herndon and B. M. Herndon, Georgetown, Ky.

Ky., Lexington.—Siebert-Herndon Electric Co. incorporated with \$10,000 capital stock

by F. O. Siebert, J. W. Thacker, J. P. Herndon and B. M. Herndon.

Ky., Louisville.—Southern Hydro-Electric Co. incorporated with \$6000 capital stock by George G. Fetter, J. H. Cochran and Wallace Hoeling, all of Louisville; G. B. Hoeling, Lexington, Ky., and others to develop water-power of Dix River.

Ky., Louisville.—Kentucky Electric Co. awarded contract to Falkenau Electrical Construction Co., Chicago, Ill., for improvements to plant, including construction of pipe line 150 feet long to Ohio River for supplying water; expenditure about \$40,000. (Noted in October.)

La., Mandeville.—Mandeville Electric Light & Ice Co. will soon begin erection of proposed light and ice plant.

Miss., Charleston.—City will improve water-works, electric-light plant and sewer system; will issue \$10,000 of bonds. Address The Mayor.

Mo., Maryville.—Maryville Electric Light & Power Co., Charles Wirtz, chief electrician, will enlarge power plant; will install boilers and 200-horse-power engine.

Mo., Mexico.—Mexico, Santa Fe & Perry Traction Co., C. W. Gaither, secretary, will, it is reported, construct three electric power plants.

Mo., Springfield.—Springfield Gas & Electric Co., H. J. Fox, superintendent, will erect power-houses and gas-producer plants in several cities where franchises have been received.

Okl., Oklahoma City.—Union Gas & Electric Co. incorporated with \$50,000 capital stock by F. L. Braniger, C. S. Stephenson and E. B. Brown.

Okl., Thomas.—City will expend approximately \$12,000 in proposed enlargement of plant; will install 150-kilowatt engine-type generator, three-phase, 60-cycle, 2300-volt, to run at 200 or 225 R. P. M.; 250-horse-power engine, using 100 pounds steam pressure, generator direct connected to shaft; 125-horse-power boiler, 125 pounds working pressure, full flush front, galloway frame suspension, McClave type shaking grates; bids opened December 12; F. Murch & Co., Clinton, Okla., engineers; W. S. Robinson, City Clerk.

S. C., Beaufort.—City will expend about \$18,000 to construct electric-light plant recently mentioned. R. A. Long and W. F. Marscher of Beaufort are engineers.

Tex., Calvert.—Louis Block, Room 15, No. 45 East 42d St., New York, is engineer in charge of building for Calvert Water, Ice & Electric Light Co. at Calvert, Tex. (Recently incorrectly noted as "Louis Beck.")

Va., Richmond.—Common Council authorized additional appropriation of \$65,000 to complete overhead system in connection with municipal power and lighting plant; original bond issue was \$350,000. E. W. Trafford, Chamber of Commerce Bldg., Richmond, is consulting engineer. (Previously noted.)

Va., Roanoke.—Roanoke Electric Light & Power Co. incorporated with capital stock of \$1,000,000 to operate water-power-electric plant on Roanoke River; M. Coffman, president, Woodstock, Va.; I. T. Stoneberger, secretary-treasurer, Edinburg, Va.

Va., Staunton.—Virginia School for Deaf and Blind will petition Legislature for appropriation to erect electric-light plant to cost \$10,000.

W. Va., Millville.—Winchester & Washington Railway of Winchester, Va., has engaged P. O. Kellholtz, consulting engineer, 615 Continental Bldg., Baltimore, Md., to prepare plans and specifications and superintend construction of steam power plant at Millville as auxiliary to water power electric plant; proposes to install 1500-kilowatt plant, 2300 volts, three phase, 60 cycles, for electric light and power purposes; also for distribution through Jefferson and Berkeley counties, West Virginia, and through Clarke and Frederick counties of Virginia.

W. Va., New Martinsville.—City has granted franchise to New Martinsville Electric Light, Heat & Power Co., R. E. Hall, chief engineer, to furnish electricity for lamps in Brooklyn Junction.

FERTILIZER FACTORIES

Ga., Columbus.—Dixie Chemical & Mining Co. incorporated by Frank A. Phillips, M. F. Thompson, Jr., and T. E. Clardy; will establish plant for manufacturing fertilizer and fertilizer materials.

Ga., Cuthbert.—Home Mixture Fertilizer Co., Columbus, Ga., will establish branch fertilizer plant.

Ga., Rome.—North Georgia Fertilizer Co., main office, Atlanta, Ga., care of Atlanta Oil & Fertilizer Co., will establish fertilizer fac-

tory with daily capacity of 40 tons; plans not completed; Wm. McKenzie, president; L. G. Neal, vice-president; U. E. Keeter, secretary; all of Atlanta.

FLOUR, FEED AND MEAL MILLS

Ark., Arkadelphia.—Arkadelphia Milling Co., J. M. Adams, president, awarded contract to Stanton & Collamore, Little Rock, for erection of flour mill and two-story warehouse; flour mill five stories; 64x35 feet; 65 feet high; brick, concrete and steel. (Further facts previously mentioned.)

Ga., Dublin.—J. T. Pope will establish roller process flour mill.

FOUNDRY AND MACHINE PLANTS

Ala., Bessemer.—Stoves.—Smith Manufacturing Co. will rebuild plant recently reported burned; loss \$30,000.

Fla., Tampa.—Foundry.—Biglow & Spring Co. incorporated with \$15,000 capital stock; Silas Biglow, president; Leland Biglow, vice-president; John A. Spring, secretary-treasurer.

Ga., Rome.—Car Foundry.—Ideal Brick Car Co. incorporated with authorized capital stock of \$25,000 by M. N. Griffin, James A. Glover and E. T. Ashby; will continue manufacture of patent lift cars for plants with open-yard drives; will increase present output of 100 cars annually.

N. C., Burlington.—Machinery, Castings, etc.—Cates Machine & Bridge Co. incorporated with \$125,000 capital stock by J. W. Cates, J. M. Cook and H. L. Fowler.

Tenn., Knoxville.—Foundry.—Southern Pipe & Foundry Co. will double capacity of plant.

Tenn., Memphis.—Allen Engineering Co. organized with \$40,000 capital stock by Thomas H. Allen, N. Hill Martin, J. A. Omberg, Jr., and others; will establish foundry and engage in general engineering and steel construction.

Tex., Abilene.—Culverts and Road Machinery.—W. J. Moore, Port Huron, Mich., contemplates establishment of plant for manufacturing steel culverts and road machinery.

Va., Pulaski.—Foundry.—Pulaski Foundry and Machine Works will rebuild plant reported burned; will erect brick and steel \$2500 structure.

W. Va., Wheeling.—Cars.—Pittsburg Construction Co., Diamond Bank Bldg., Pittsburgh, Pa., will not build works recently reported as planned.

W. Va., Fairmont.—Mining Machinery, etc. Standard Tie & Manufacturing Co. incorporated with \$25,000 capital stock by J. J. Ross, M. L. Hutchinson, C. E. Hutchinson and others; will manufacture Ross patent mine tie and drum brake, mining machinery, cars, etc.

GAS AND OIL DEVELOPMENTS

Ky., Greenville.—Gas Plant.—W. L. Hudson, Louisville, Ky., purchased franchise and will establish gas plant.

Md., Frederick.—Capitalists represented by Milton G. Urner will apply for franchise to supply city with natural gas from West Virginia fields.

N. C., Raleigh.—Standard Gas Co. will expend about \$15,000 for improvements to plant, including large gas holder.

Okl., Ardmore.—Joiner City Oil & Gas Co. incorporated with \$250,000 capital stock by C. M. Joiner, H. G. Wolverton and O. H. Wolverton.

Okl., Eldorado.—Missouri-Oklahoma Gas Co. incorporated with \$25,000 capital stock by C. D. Hill, M. T. Stauffer, C. A. Edgar and others.

Okl., Okmulgee.—Henry Oil Co. incorporated with \$100,000 capital stock by D. W. Henry, E. L. Tallman and W. B. Pine.

Okl., Ravia.—Bitumen Company incorporated by W. B. Tucker, Reagen, Okla.; A. I. Chapman, Ravia; F. G. Streater, Dallas, Tex.

Tex., Austin.—S. W. Fordyce, St. Louis, Mo., and associates purchased Waters-Pierce Oil Co. properties at \$1,431,741.78; properties include oil wells, pipe lines, tanks, warehouses and other facilities for distribution of oil; purchasers will organize company to continue operation.

Va., Manassas.—Pennyr Coal, Oil & Gas Co., People's Bank Bldg., has completed arrangements to build first derrick, 80 feet high; will drill for oil, gas and coal; W. R. Tulloss, general manager. (Previously reported organized, etc.)

W. Va., Morgantown.—Blackstone Oil & Gas Co. incorporated with \$10,000 capital stock by M. L. Brown, A. H. Thompson, W. Lloyd Morris and others.

ICE AND COLD-STORAGE PLANTS

Ga., Augusta.—Interstate Ice & Fuel Co., G. L. Baker, president, Columbia, S. C., will rebuild portion of plant reported burned; loss \$10,000.

Ky., Bowling Green.—R. W. Lynch, 1029 Center St., contemplates construction of ice and cold-storage plant in city of 12,000 inhabitants.

Ky., Louisville.—Crescent Ice & Storage Co. (recently noted incorporated with \$30,000 capital stock) will establish ice plant of 40 tons capacity; awarded contract to American Machine Co., Louisville; let contract for erection of building to Bailey & Koerner of Louisville; company may install additional 40-ton machine later; plant to be in operation by March 1.

La., Mandeville.—Mandeville Electric Light & Ice Co. is arranging for early erection of proposed plant.

Mo., Charleston.—Southeast Missouri Ice, Light & Power Co., S. B. Hunter, president, will rebuild plant recently reported burned; fireproof construction; plans not definite.

Okl., Enid.—Company organized with Charles F. Weber, president, J. Hill secretary, both of Wichita, Kans.; W. A. Graves, vice-president, Enid; will establish ice plant.

Okl., Enid.—Arctic Ice & Refrigerating Co. will be name of company recently noted organized with \$100,000 capital stock to establish ice plant; Chas. F. Weber, president; W. A. Graves, vice-president; J. H. Hill, secretary; J. H. Hill, treasurer and manager; will erect 200x150-foot mill-construction building; plant to have capacity of 200 tons refrigeration; Chas. Phillips, Wichita, Kans., to be addressed. (See "Machinery Wanted.")

Tex., Houston.—Heights Ice Co., Wm. D. Roberts, Memphis, Tenn., president, will operate 30-ton ice plant; machinery purchased. (Recently noted as "Roberts Cotton Oil Co.")

Tex., Beaumont.—Beaumont Ice, Light & Refrigerating Co. will not erect additional ice plant. (Recently incorrectly reported.)

Tex., Harlingen.—A. H. Weller, Lon C. Hill, both of Harlingen, and Blalack & Tucker, Brownsville, Tex., are interested in organization to establish ice plant; will install power sufficient to operate gin and cottonseed-oil mill to be established at cost of \$75,000.

IRON AND STEEL PLANTS

Okl., Oklahoma City.—Structural Iron, etc. Southwestern Iron & Steel Structural Co., R. H. Dorsey, general manager, Gainesville, Tex., will establish foundry and machine shops for manufacturing flat iron, windmills and structural iron and steel utilities; annual output, 1000 tons of flat irons and 6000 windmills; will erect two buildings, one story each, 80x200 feet and 100x150 feet, respectively; construction to begin January 15; cost \$80,000; site to contain 600,000 square feet. Mora C. Clark, Oklahoma City, Okla., is president of company.

LAND DEVELOPMENTS

Ala., Birmingham.—Edgewood Terrace Land Co. incorporated with \$15,000 capital stock; Stephen Smith, president; George C. Oliver, vice-president; G. T. Brazleton, secretary-treasurer.

Ark., Cooper (not a postoffice).—Caddo River Lumber Co., M. R. Smith, president, Rosboro, Ark., is proceeding with plans to develop new town of Cooper, to which point Caddo & Choctaw Railroad from Rosboro has been completed.

Ark., Little Rock.—Midland Land & Development Co. (recently reported incorporated with \$100,000 capital stock) was organized to purchase 17,000 acres of cut-over timber land and develop for colonization; officers are P. A. Hilderbran, T. J. Rittenhouse and R. W. Polk; main office, 102 Louisiana St.

Ga., Atlanta.—Gate City Realty Co. incorporated with \$10,000 capital stock by A. O. Davis, William Edwards and Paul Etheridge.

Ga., Atlanta.—Mechanics' Realty & Improvement Co. incorporated with \$25,000 capital stock by E. E. Goodloe, I. M. Bowman and Robert P. Jones.

Miss., Monticello.—Ozone Land Co. incorporated with \$10,000 capital stock by S. N. Hickman, H. M. Sims and H. P. Murdock.

Mo., Kansas City.—Cattien Investment Co. incorporated with \$3000 capital stock by May Belle Cattien, W. H. Cattien and J. S. Kirkpatrick.

Mo., St. Louis.—Altman Real Estate Co. incorporated with \$35,000 capital stock by Bruce Starke, Charles S. Burg and Lewis R. Wood.

Mo., St. Louis.—Heights Realty & Amuse-

ment Co. incorporated with \$70,000 capital stock by Louis Obert, Jr., William A. Obert and Charles L. Obert.

Mo., St. Louis.—Myra Realty Co. incorporated with \$50,000 capital stock by Mary D. Engleman, Dorothy C. Engleman and Frank R. Ruhr.

Mo., St. Louis.—Tisden Investment Co. incorporated with \$25,000 capital stock by John W. Dryden, Louise Dryden and Perry P. Taylor.

Mo., St. Louis.—Hercules Land Co. incorporated with \$5000 capital stock by John W. Harrison, Jesse French, both of St. Louis, and Thomas Douglas, Joplin, Mo.

Okl., Bromide.—Delaware Development & Construction Co. incorporated with \$50,000 capital stock by W. H. Jackson, E. T. Brown, O. E. Snyder and C. W. Jackson.

Okl., Lockridge.—Lockridge Development Co. incorporated with \$22,000 capital stock by W. C. Kindt, Oklahoma City, Okla., and others.

Okl., Oklahoma City.—Putnam Company incorporated with \$500,000 capital stock; I. M. Putnam, president; will develop Putnam City, suburb of Oklahoma City.

S. C., Columbia.—Monticello Home Co. incorporated with \$30,000 capital stock; W. H. Hattiwanger, president; P. C. Price, vice-president; Ames Hattiwanger, secretary-treasurer; purchased 80 acres of land on Winnsboro road; will develop as residential district.

S. C., Greenwood.—Colonial Heights Co. incorporated with \$7500 capital stock; H. L. Watson, president.

Tenn., Chattanooga.—Pioneer Realty Co. incorporated with \$10,000 capital stock by O. W. James; L. P. Berry, M. R. Carson and others.

Tenn., Sweetwater.—Rugby Land Co. purchased Rugby Company, Ltd., farming and coal and timber lands in Fentress, Morgan and Scott counties, 25,000 acres; will develop by colonization and probably arrange for cutting timber and mining coal; Sam E. Young, president, Sweetwater; Alfred Bull, vice-president, London, England; John Toomey, general manager, Helenwood, Tenn.

Tex., Houston.—Southwestern Land & Development Co. incorporated with \$50,000 capital stock by A. A. Luther, Charles A. Dyer and J. H. Lobit; offices, 1005 Capitol Ave.

Tex., Palestine.—C. D. Jarratt, N. A. Slover and J. S. Herman purchased 500 acres of land at May Delle; will develop part as townsite.

Va., Norfolk.—Glencove Links Corporation incorporated with \$30,000 capital stock; William Shaner, president; W. C. Dickson, secretary-treasurer; C. P. Weston, vice-president.

Va., Norfolk.—H. Garrett Smith purchased about 500 acres of land on Chesapeake Bay, and will develop as summer cottage resort.

Va., Richmond.—Abbey Realty Corporation incorporated with \$10,000 capital stock; J. G. McNeal, president, Norfolk, Va.; J. E. Donahue, vice-president; J. L. Bunting, secretary-treasurer, both of Richmond.

Va., Roanoke.—New York and Baltimore capitalists purchased through Beller & Wilson, Roanoke, and J. Q. Laitman, 14 Stock Exchange Bldg., Baltimore, Md., 270 acres of land near Roanoke and will develop as residential section; will construct sewers, sidewalks, streets, boulevards, etc.

W. Va., Martinsburg.—George S. Roush, George M. Bowers, S. W. Walker and others are organizing company to develop residential section.

LUMBER-MANUFACTURING PLANTS

Ala., Mobile.—Louisell Lumber Co. incorporated with \$16,000 capital stock; W. H. Louisell, president; Cyril Louisell, secretary; William Van Heuvel, treasurer; T. M. Stevens, vice-president; has about 15,300 acres, containing approximately 200,000,000 feet of pine; contemplates erection of two mills with 1,000,000 capacity each; equipment for present needs supplied. (Recently noted purchasing timber land on Pearl River and to construct 20 miles of logging road, etc.)

Fla., Springfield.—Gulf Lumber & Railway Co. incorporated with \$60,000 capital stock; Y. L. Watson, president, Quincy, Fla.; J. A. McLaurin, vice-president, Tallahassee, Fla.; C. H. Boyd, secretary-treasurer, Hinson, Fla.; Covington.—John A. Todd, Bonfouca, La., purchased 3050 acres of land, estimated to cut 30,000,000 feet of timber, and will establish mill on Bayou Lacombe to cut the timber; construction to begin in February.

La., Pointe Coupee Parish.—Southern Export Land, Lumber & Timber Co., incorporated with \$500,000 capital stock by W. D.

Phillips and M. W. Weeks, both of New Orleans, La., purchased standing timber on 18,000 acres of land in Pointe Coupee parish from Capicola Land Co., Rand-McNally Bldg., Chicago, Ill., and will install several sawmills and cut the timber.

La., Onvill.—Salmon Brick & Lumber Co., Slidell, La., will establish sawmill.

La., Sabine Parish.—Wyatt Lumber Co., F. A. Goodrich, president, Wyatt, La., will establish plant to develop timber recently mentioned; acquired about 24,000 acres, carrying approximately 150,000,000 feet yellow pine and 60,000,000 feet hardwoods; contemplates building single band-saw mill of 50,000 to 60,000 feet capacity, also dry kiln and planing mill of same capacity; plans include construction of about 14 miles railroad; probable expenditure, \$150,000; will open proposals for machinery, etc.; contemplates beginning building by March 1; A. H. Henderson, treasurer and general manager, to have charge of building of plant and railroad. (Lately noted to increase capital stock to \$500,000.)

La., Shreveport.—Jas. J. Copellar Tie & Timber Co., 518 First National Bank Bldg., organized with \$25,000 capital stock and probability of increasing to \$50,000; will manufacture sawn and hewn ties and railroad material; will also handle lumber, piling, etc.; Jas. J. Copellar, general manager.

Miss., Phillip.—Tallahatchie Lumber Co. will establish hardwood sawmill and plant for manufacturing chair and dimension stock from slabs and low-grade lumber.

Mo., St. Louis.—Sendelbach-Cram Lumber Co. incorporated with \$25,000 capital stock by Edward C. Sendelbach, George A. Cram and Frank B. Cram.

N. C., Morehead City.—John F. Bell Company incorporated with \$15,000 capital stock by C. M. Wade, J. F. Bell and E. R. Swindell.

N. C., New Bern.—Tolson Lumber & Manufacturing Co. (East Front St., near A. C. L. Railroad) incorporated with \$5000 capital stock; H. W. Simpson, president; J. L. Tolson, vice-president; L. C. Tolson, secretary-treasurer; will operate planing mill and woodworking plant; will also deal in lumber; plant to be in operation in January.

N. C., Wade.—Oliver-Parker Lumber Co. incorporated with \$25,000 capital stock by W. J. Oliver, L. R. Parker and others.

N. C., Siler City.—Stout Bros. Lumber Co. incorporated with \$15,000 capital stock.

Tenn., Jacksboro.—Laurel Branch Lumber Co. incorporated with \$12,000 capital stock by H. L. Smith, T. C. Jacks, I. T. Jacks and others.

Tex., Atascosa.—Atascosa Lumber Co. incorporated with \$15,000 capital stock by John Griffith, B. B. Daugherty and S. B. Hitchcock.

Tex., Dallas.—Ragley-Saner Lumber Co. (recently noted) will establish double-band sawmill in new town (not yet named) of Sabine county; buildings to be of ordinary construction; dates of opening building and machinery proposals not set; estimated daily capacity of plant, 125,000 feet long leaf yellow pine; reported capital stock, \$300,000; officers are W. G. Ragley, president; J. B. Wilson, vice-president; John C. Saner of Dallas, secretary, treasurer and manager.

W. Va., Charleston.—Belle-Mead Lumber Co. (recently reported incorporated with \$5000 capital stock) purchased Camden Lumber Co.'s property, 4200 acres; plant equipped; capacity 35,000 feet; operation by January 1; L. Prichard, president; M. Prichard, secretary-treasurer; G. E. Breece, general manager; W. H. H. Bailey, superintendent.

W. Va., Chapmanville.—Guyan Valley Coal, Land & Lumber Co. (recently reported incorporated with \$300,000 capital stock) contemplates development of about 3600 acres timber; principal office, 701 American Trust Building, Cleveland, O. (See "Coal Mines and Coke Ovens.")

W. Va., May.—Gillfillan, Nelli & Co. incorporated with \$400,000 capital stock by R. H. Morris, Oscar Latt, C. J. Colburn and others.

METAL-WORKING PLANTS

Ga., Atlanta.—Jewelry.—Banta-Cole Company incorporated with \$5000 capital stock by Harry S. Banta and Alta M. Cole.

MINING

Ark., Little Rock.—Fuller's Earth.—Little Rock Refiners' Clay Co., L. E. Walker, president, recently reported incorporated with \$50,000 capital stock, will continue to operate established plant.

Ga., Marble Hill.—Marble.—Southern Marble Co. is adding extensively to quarrying

plant, including machinery from New York and Providence (R. I.) plants, which have been dismantled; main office at Worcester, Mass.

Md., Marriottsville.—Limestone.—Wade H. D. Warfield, Sykesville, Md., will form company to develop limestone deposits.

Tenn., Black Fox.—Silex, etc.—Tennessee Refining Co. will double capacity; will erect 60x200-foot building.

Tenn., Chattanooga.—Iron.—Sewanee Fuel & Iron Co. will increase capital stock to \$1,000,000 and issue \$500,000 of bonds.

Tenn., Ducktown.—Copper.—Tennessee Copper Co., J. V. Bohn, general superintendent, will reconstruct portion of plant lately damaged by fire; now preparing plans for buildings; is opening two additional mines with daily capacity of 300 to 500 tons; New York office at 11 Broadway.

Tex., Llano.—Gold.—McCarty Moore, Dallas, will install 50-ton reducing plant and other machinery for developing Heath gold-mining property.

MISCELLANEOUS CONSTRUCTION WORK

Ark., Helena.—Levee.—Commissioners Cotton Belt Levee District No. 1, Greenfield Quarles, secretary, awarded contract to Roach & Stansell, Memphis, Tenn., to enlarge two miles of levee. (Previously noted.)

Miss., Biloxi.—Bulkhead.—City will construct bulkhead on breakwater on West Beach; bids will be invited. Address The Mayor.

Tenn., Memphis.—Levee.—Bids will be opened December 22 for levee work in Lower St. Francis Levee District; M. L. Walker, Major, Engineers, Mississippi River Commission, first and second districts, United States Engineer Office, Custom-house, Memphis. (See "Machinery Wanted.")

MISCELLANEOUS ENTERPRISES

Ala., Seminoles.—Tobacco Cultivation.—Tobacco Growers' Syndicate organized with \$50,000 capital stock by D. S. Craft, John Ferguson, Robin B. Wolf, C. B. Borter and others; will cultivate Sumatra and Havana tobaccos.

Ark., Little Rock.—Construction.—Carrigan Construction Co. incorporated with \$25,000 capital stock; P. H. Carrigan, president; H. H. Baker, treasurer.

Ark., Pine Bluff.—Farming.—Goshen Farm Co. incorporated with \$10,000 capital stock by H. H. Warren, R. L. Rutherford and T. Y. Murphy.

D. C., Washington.—Contracting.—Bond Building Co. incorporated with \$10,000 capital stock; E. E. Jordan, president; C. W. Darr, secretary; L. B. Platt, vice-president.

Fla., Tallahassee.—Planting.—Carolina-Florida Planting Co. incorporated with \$25,000 capital stock; A. P. McCaskill, president, Tallahassee; J. W. Stuckey, secretary-treasurer; J. C. McCaskill, vice-president, both of Bainbridge, Ga.

Fla., Key West.—Marine Railway.—Bids will be received at Bureau of Yards and Docks, Navy Department, Washington, D. C., until January 15 for construction of marine railway at United States naval station at Key West; plans and specifications on file at bureau or with commandant of navy-yard named; R. C. Hollyday, chief of bureau.

Ga., Atlanta.—Construction.—Knox Construction Co. incorporated with \$10,000 capital stock by Fitzhugh Knox, G. W. Lane and Horace L. Fincher.

Ga., Atlanta.—Printing.—Campbell Printing Co. incorporated with \$25,000 capital stock by Robert L. Campbell and Edward Y. Clarke.

Ga., Atlanta.—Mercantile.—Ward-Truitt Company, Box 337, will organize when charter is granted; contemplates erection of 125-foot six-story building of mill construction; \$150,000 capital stock. (Recently noted.)

Ky., Henderson.—Flour Whitening Machine. Missing Link Co. incorporated with \$25,000 capital stock by F. Haag, W. S. Forwood, F. S. Haag and others.

Ky., Louisville.—Automobiles.—Bayless Motor Car Co. incorporated with \$46,500 capital stock by W. K. Bayless, T. C. Bayless and E. B. Chenault.

Ky., Louisville.—Ties, Lumber, etc.—Kentucky Tie Co. incorporated with \$25,000 capital stock by Frank B. Russell, Louisville; James B. Hall, Lexington, Ky., and Samuel R. Russell, Irvine, Ky.; will deal in railroad ties, lumber, etc.

La., New Orleans.—Garage.—Equitable Real Estate Co. will erect garage to be leased by Crescent City Automobile Co.; 100x90 feet; cost \$25,000.

Md., Baltimore.—Construction.—Central Construction Co. incorporated by William C. Clift, 215-217 Courtland St.; Frederick F. Bayline and Vincent J. Demarco.

Md., Baltimore.—Heating-plant Installation. Alva Hubbard Co. incorporated by Alva Hubbard, 409 St. Paul St.; Edwin L. Tunis and D. Eldridge Monroe.

Md., Baltimore.—Taxicabs.—Acme Taxi Co. incorporated by William H. Marcus, 2249 Eutaw Pl.; Minnie Marcus and Henry S. Frank.

Md., Baltimore.—Lamps.—United Gas Lamp Co. incorporated by Frances Weiss, 1526 East Baltimore St.; Wm. H. Smith and Edward J. Wolfe.

Md., Baltimore.—Noleak Co. incorporated with \$25,000 capital stock by Herbert Tempert, 2571 West Baltimore St.; Bertram Constable, Alex. W. MacDonald and Walter W. Parker.

Md., Baltimore.—Automobiles.—McMullen-George Automobile Co. incorporated with Philemon H. Tuck, 207 North Calvert St.; Dysart McMullen and C. H. Carter George, 210 East Eager St.

Md., Baltimore.—Construction.—Reeser Construction Co. incorporated by Burton W. Reeser, William Reeser and August Schnepfe, Dime Savings Bank Bldg.

Md., Hancock.—Orchard.—Elberta Orchard Co. organized with \$25,000 capital stock by Orlando Harrison, George A. Harrison, Frisby Smith and others; secured 400 acres of land and will plant in peach and apple trees.

Mo., Bonne Terre.—Publishing.—Star Publishing Co. incorporated with \$15,000 capital stock by I. L. Page, Hilda Page and A. W. Thornton.

Mo., Kansas City.—Engraving.—Parker-Chambers Engraving Co. incorporated with \$10,000 capital stock by J. W. Parker, L. E. Pfaff, George D. Chambers and others.

Mo., Kansas City.—Bridge Construction.—Missouri Bridge Co. (recently reported incorporated with \$25,000 capital stock) will build railway and other bridges; A. G. Taubert, president; D. Wilson, vice-president; A. H. Taubert, secretary-treasurer; Kansas City address, 3118 East 15th St.; also Box 702, St. Joseph, Mo.

Mo., Kansas City.—Transfer.—Only Way Transfer Co. incorporated with \$15,000 capital stock by Frank L. Ryan, Jr., John G. Schalech and Mary Benke.

Mo., Kansas City.—Steam Laundry.—Ideal Laundry Co. incorporated with \$3000 capital stock by George F. Gilpatrick, William A. Roberts and H. A. Gilpatrick.

Mo., St. Louis.—Automobiles.—Ettwein Motor Co. changed name to McGee-Huckell Motor Co. and increased capital stock from \$20,000 to \$40,000.

Mo., St. Louis.—Garage.—Seneca N. Taylor will erect garage to be leased to Park Auto Co. and Brown Bros.; three stories; 128 feet 9 inches by 150 feet; brick, stone and iron construction; plate-glass windows in front; fireproof wall dividing structure into two sections.

Mo., St. Louis.—Cutlery Hardware.—Bridge Cutlery Co. incorporated by A. L. Shapleigh, S. Norvell, W. L. Clarke and others.

Mo., St. Louis.—Cutlery.—Enterprise Cutlery Co. incorporated by A. L. Shapleigh, S. Norvell, W. L. Clarke and others.

Mo., St. Louis.—Laundry.—J. Arthur Anderson rill erect and equip annex to laundry.

Mo., St. Louis.—Scenic Railway Construction.—Mountain Railway Construction Co. incorporated by Louis E. Gramlich, J. A. Gramlich and Albert H. Peters.

N. C., Charlotte.—Gas and Electric Engines. Southern Gas & Electric Co. incorporated with \$4000 capital stock by W. D. Wilcox, Wm. H. Monty and Albert M. Guillet.

Okla., Ava.—Rose Cream.—Alva Rose Cream Co. incorporated with \$20,000 capital stock by E. A. Wade, D. C. Green and others.

Okla., Oklahoma City.—Grocery.—Collins-Deltz-Morris Co. incorporated with \$200,000 capital stock by Oscar H. Dietz and Tunall Morris, Oklahoma City, and J. Burnett Collins, Fort Worth.

Okla., Oklahoma City.—Construction.—Union Gas & Electric Co., 209 South Broadway (recently reported incorporated under "Electric-light and Power Plants" with \$50,000 capital stock) will conduct business of construction, wiring, isolated lighting plants, heating, ventilating, fixtures and supplies; F. L. Braniger, president; C. S. Stephenson, secretary and manager; E. B. Brown, treasurer. (See "Machinery Wanted.")

Okla., Sapulpa.—Publishing.—Sapulpa Publishing Co. incorporated with \$25,000 capital stock by W. E. Verity, O. M. Irelan and H. G. Beard.

S. C., Charleston.—Engineering and Con-

tracting.—Charleston Engineering & Contracting Co. incorporated with \$10,000 capital stock by T. C. Stevenson and John A. McCarmack.

S. C., Greenville.—Steam Laundry.—Mary G. Cleveland estate will repair and re-equip Gates Steam Laundry, recently reported burned; loss \$15,000.

S. C., Spartanburg.—Automobiles.—Southern Auto Co. incorporated with \$10,000 capital stock by A. B. Calvert, Webb Thompson and A. L. Crutchfield.

Tenn., Chattanooga.—Construction.—Dixie Construction Co., 828 James Bldg., recently reported incorporated, will conduct general contracting and construction, including earth and rock excavation, concrete foundations, sidewalks, railroad and highway grading, etc.; T. S. Howser, president; Howard Eggleston, secretary; J. R. Ryan, treasurer.

Tenn., Knoxville.—Publishing.—World Publishing Co. incorporated with \$25,000 capital stock by S. G. Heiskell, Gordon Nye, T. I. Stephenson and others.

Tenn., Memphis.—Engineering, etc.—Allen Engineering Co. organized with \$40,000 capital stock by Thomas H. Allen and others. (See "Foundry and Machine Plants.")

Tenn., Nashville.—Floor Laying.—Nashville Floor Laying Co. incorporated with \$5000 capital stock by Lawrence J. Vrechota, Edward Biggers, R. T. Wilson and others.

Tex., Bartlett.—Koepe-Brown Company incorporated with \$15,700 capital stock by R. E. Koepe, I. L. Brown and Otto Cassens.

Tex., Beaumont.—Vehicles and Implements. Benumot Carriage & Implement Co. incorporated with \$30,000 capital stock by H. A. Pearlstein, John C. Chaney and Jake Giles.

Tex., Dallas.—Hunnydew Company incorporated with \$10,000 capital stock by Ponder Greer, S. J. Hathorn and M. L. Graham.

Tex., El Paso.—Grain Elevator.—Sunset Grain & Elevator Co. incorporated with \$30,000 capital stock by J. H. Cheatham, James Harrison and Fritz Straughn.

Tex., Fort Worth.—Gas Supplies and Construction.—National Gas Supplies & Construction Co. incorporated with \$10,000 capital stock by Walter B. Scott, R. E. Harding, William Little and others.

Tex., Galveston.—Steam Laundry.—Rex Steam Laundry increased capital stock from \$10,000 to \$20,000.

Tex., Houston.—Publishing.—Independent Publishing Co. incorporated with \$5000 capital stock by Robert Black, S. R. Maxwell and W. W. Holland.

Tex., Rockport.—Immigration.—Gulf Coast Immigration Co. incorporated by J. R. Downing, J. D. Lockhart and A. M. Downing.

Va., Berkeley.—Marine Railway.—R. D. Lamin will construct marine railway.

Va., Lynchburg.—Groceries.—C. H. Beasley & Bro. incorporated with \$250,000 capital stock; E. C. Beasley, president; J. R. Shaner, vice-president; C. H. Beasley, secretary-treasurer.

Va., Petersburg.—Live-stock.—Virginia Live-Stock Sales Co. incorporated with \$50,000 capital stock; John H. Patterson, president; S. H. Turner, secretary-treasurer.

Va., Manassas.—Publishing.—Virginia Publishing Co. incorporated with \$10,000 capital stock; C. E. Lipscomb, president, New York; J. E. Nelson, treasurer; F. E. Garrison, secretary, both of Manassas; will publish newspaper.

Va., Richmond.—Printing.—Houseman Printing Co. incorporated with \$10,000 capital stock; Harry Houseman, president; E. F. Woodall, vice-president; A. W. Smith, secretary-treasurer.

Va., Staunton.—Lumber Barges.—Larrimore Corporation incorporated with \$50,000 capital stock; J. S. Panake, president; L. A. Beck, secretary; E. K. Mercereau, vice-president; will operate barges for handling lumber.

W. Va., Clarksburg.—Building Supplies.—Sterling Building Supply Co. incorporated with \$50,000 capital stock by Thos. Shaw, G. R. Sinsel, D. O. Booth and others.

W. Va., Purgitsville.—Orchard.—High Knob Orchard Co., incorporated with \$25,000 capital stock, has elected John P. Hart president, G. S. Starcher secretary, Dallas F. Rogers treasurer; will cultivate peaches, apples and plums. (See "Machinery Wanted.")

W. Va., Piedmont.—Developing.—Oaxaca Developing Co. incorporated with \$600,000 capital stock by L. F. Leeper, C. C. Culbertson and R. McV. Drane.

W. Va., Sistersville.—Transportation.—National Transportation Co. incorporated with \$5000 capital stock by T. K. Smith, Michael Keating, O. F. Langworthy and others.

MISCELLANEOUS MANUFACTURING PLANTS

Ark., Jonesboro—Creamery.—G. L. Maddy purchased machinery and will establish creamery.

Fla., Baldwin County.—W. D. Owens, Sr., president of Owens Naval Stores Co., purchased from Southern States Lumber Co., Muscogee, Fla., 2700 acres of timber land and will turpentine next year.

Fla., West Tampa, Station Tampa—Cigars. Samuel I. Davis & Co. will erect cigar factory to replace present structure; brick and stone; three stories; 200x50 feet.

Ga., Gainesville—Overalls.—R. H. Merck has purchased and will operate plant of Smith-Thomas Overall Co.

Ga., Macon—Automatic Musical Instruments.—Automatic Music Co. incorporated with \$10,000 capital stock by F. B. Coates, C. N. Guttenberger and F. W. Rayfield.

Ga., Rome—Bottling.—Nova-Kola Bottling Co. incorporated with \$20,000 capital stock by Norris Smith, Julian Smith and others.

Ky., Louisville—Medical Appliances.—Falls City First Aid Co. incorporated with \$10,000 capital stock by T. J. Tierney, George Buechel, J. B. Mattingly and others; will manufacture appliances for giving first aid to injured.

Ky., Louisville—Chemicals.—Louisville Chemical Co. incorporated with \$5000 capital stock by James B. Brown, John W. Freeland, Lewis W. Watson, all of Louisville, and S. J. Shackelford, Frankfort, Ky.

La., Arnaudville—Sugar.—Le Teche Sugar Co. (recently reported organized with \$1,000,000 capital stock to build sugar refinery) proposes to erect 1500-ton sugar-house, with 10 to 15 miles of railway; plans not matured; A. C. Durio, president; D. P. Martin, vice-president; J. M. Olivier, secretary; Geo. L. Roger, treasurer.

La., Mansfield.—De Soto Industrial Co. contemplates establishment and erection of small steam bakery.

La., New Orleans—Bakery.—Lawson F. Garic & Co. leased building and will establish fancy bread and cake bakery.

La., New Orleans—Brass Beds, etc.—Crescent Bed Co., 705 People's Bank Bldg., will rebuild plant recently reported burned; will manufacture brass and iron beds, springs, etc.; will purchase and install machinery. (See "Machinery Wanted.")

La., New Orleans—Bottling.—Nova-Kola Company of Louisiana incorporated with \$50,000 capital stock by Charles F. Bodey, Virgil Jones and C. W. Power.

La., Shreveport—Hames.—Star Hame Manufacturing Co., Blanchester, Ohio, contemplates establishment of hames factory.

Md., Baltimore—Chemicals.—Sephia Chemical Co. incorporated with \$5000 capital stock by Archibald G. Reed, Daniel B. Miller and Randolph Gordon Dulaney, The Winona.

Md., Baltimore—Mechanical Appliances.—Universal Tire Setter Co. incorporated with \$100,000 capital stock by Edgar H. Bankard, purchasing agent, B. & O. R. R., B. & O. Bldg., and John M. Walker.

Md., Baltimore—Distributors.—Royal Distributor Co. incorporated with \$10,000 capital stock by Clarence L. Crise; William C. Hughes, Ferndale Ave., Howard Park, and Randolph Gordon Dulaney, The Winona.

Md., Cumberland—Glass Etching.—Maryland Glass Etching Co. will be reorganized by George Truog and others, under name of Westfield Glass Co., to resume operation of glass-etching plant; will probably increase capacity.

Mo., Huntsville.—Harring Manufacturing Co. incorporated by E. B. Jackson, J. F. Bentley and Aubrey Hammett.

Mo., St. Louis.—Acetylene Gas, etc.—Auto Gas and Compressed Air Co. incorporated by Charles Marlen, Otis O. Petty, William Krieger and others.

Mo., St. Louis—Electrical Appliances.—Electro-Magnetic Appliance Co. incorporated with \$50,000 capital stock by Harautian K. Kouyoumjian, Arthur Schwab, W. W. Selbert and others.

Mo., St. Louis—Furs.—American Fur Co. incorporated with \$10,000 capital stock by Herbert S. Kalish, Ralph Kalish and Lionel Kalish.

Mo., St. Louis—Phos-Ferrone.—Phos-Ferrone Manufacturing Co. increased capital stock from \$25,000 to \$50,000.

Mo., St. Louis—Milk and By-products.—Fer-Mil-Lac Process Co. incorporated with \$25,000 capital stock by John P. Cabanne, Arthur B. Clark and William H. Kemps.

Mo., St. Louis—Refrigerators.—Western Refrigerator & Manufacturing Co. incorporated

with \$12,000 capital stock by Gustave Hazel-tine, Fred Wetkopf and F. C. Books.

N. C., Asheville—Leather Tannery.—United States Leather Co., New York, is reported as to contemplate establishment of tannery.

N. C., Greensboro—Chemical.—Atlantic Southern Kemical Co. incorporated with \$200,000 capital stock by J. K. McHennym, Geo. S. Valentine and Chas. E. Ravens.

N. C., Wadesboro—Paint.—Wadesboro Paint Manufacturing Co. is being organized with Jos. W. Patrick president; contemplates establishment of plant to manufacture paint from yellow ochre, venetian red and other deposits near Wadesboro. (See "Machinery Wanted.")

N. C., Wilmington—Gas.—Tidewater Power Co. is planning to extend gas mains.

N. C., Winston-Salem—Snuff.—Hygela Snuff Co. incorporated with \$125,000 capital stock by W. T. Bohannon, G. W. Brittain and A. F. Messick.

Okla., Ardmore—Parker Asphalt & Refining Co. secured 160 acres of land and will erect asphalt refining plant.

Okla., Oklahoma City—Gas.—Union Gas & Electric Co. incorporated with \$50,000 capital stock by F. L. Branigan, C. S. Stephenson and E. B. Brown.

Okla., Oklahoma City—Clothing.—Sturm Clothing Co. incorporated with \$25,000 capital stock by J. T. Sturm, C. Edward Sturm, both of Oklahoma City, and others.

Okla., Pawhuska—Glass.—F. T. Carnock, Kane, Pa., contemplates establishment of glass factory.

S. C., Anderson—Gas.—Anderson Gas Co. (recently reported incorporated with \$100,000 capital stock to operate gas plant) will expend \$125,000 on construction, equipment and buildings; Arthur Medwehof, president; Geo. C. Thompson, secretary-treasurer; present address, Spartanburg, S. C. (See "Machinery Wanted.")

Tenn., Athens—Ice-cream.—Athens Ice & Cold Storage Co. will install machinery to manufacture ice-cream; 100 gallons (or more) daily capacity; cost \$1000; machinery proposals now open. (See "Machinery Wanted.")

Tenn., Memphis—Syrups, Extracts, etc.—Ironbrew Company incorporated with \$10,000 capital stock by J. S. Wahl, M. R. Carson, E. L. Storms, E. F. Carson and G. A. Blech; will establish plant for manufacturing syrups, extracts, soda water, etc.

Tenn., Nashville—Tailors.—Volunteer Manufacturing Co. will install 30 additional machines; Henry Nicol, superintendent.

Tex., Dallas—E. J. Fry, Marshall, Tex., and Charles J. Cobb, Dallas, awarded contract to M. S. Hoxie Construction Co., Dallas and Fort Worth, Tex., for erection of factory; cost \$5000.

Tex., Dallas—Briquettes.—Black Diamond Briquette Co. incorporated with \$5000 capital stock by Frederick Johnston, E. H. Lingo and Charles E. Rose.

Tex., Dallas—Automobile Tops.—Eastwood, Fielder & Bolanz will erect building; three stories; brick; electric elevator; cost \$14,000; to be equipped and occupied by Holcker-Elberg Company, Kansas City, Mo., for the manufacture of automobile tops, etc.

Tex., Fort Worth—Burners.—Knoxall Burner Co. incorporated with \$5000 capital stock by J. W. Burris, H. W. Smith and R. L. Jones.

Texas.—Gillilan-Vizard Naval Stores Co., New Orleans, La., and Texas Turpentine Co., Remlig, Tex., purchased turpentine privileges on over 600,000 acres of pine timbered lands in East Texas and will develop; will install 75 crops this year and will open turpentine plant or orchards at Sour Lake, Newton, Brownfield and Village, Tex.

Tex., Houston—Neckties.—Southern Development Co., Box 26, is interested in contemplated establishment of factory to manufacture neckties. (See "Machinery Wanted.")

Tex., Port Arthur—Automobiles.—J. Ormrod, Houston, Tex., is promoting establishment of automobile factory.

Tex., Port Lavaca—Brooms.—Port Lavaca Broom Co. incorporated by T. F. Hill, A. B. Lindsay and E. J. Hoffman.

Tex., San Marcos—Showcases, etc.—Howard Woodall and others will establish showcase factory and woodworking plant. (See "Machinery Wanted.")

Va., McDowell—Tannery.—United States Leather Co., New York, purchased site near McDowell containing 31 acres and will establish tannery.

Va., Norfolk—Ice Cream.—Ideal Ice Cream Co. incorporated with \$10,000 capital stock; Richard Buchanan, president; H. A. Snellings, secretary-treasurer.

W. Va., Fairmont—Glass Bottles.—Owens West Virginia Bottle Co. (recently reported

incorporated with \$100,000 capital stock) has under contract buildings and foundations to amount of \$175,000; main factory building 275 square feet and so arranged that capacity may be doubled; bin structure 22x350 feet; incline railroad for cars 22x350 feet; plans by Harry W. Wachter, 228 Colonnade Bldg., Toledo, Ohio. As previously stated, contract for buildings awarded to Donovan Wire & Iron Co., Toledo; capacity of plant, 300,000 to 400,000 gross annually; will transact business from office of Owens Bottle Machine Co., W. S. Walbridge, secretary, Toledo, Ohio.

W. Va., Point Pleasant—Boats.—Point Pleasant Dry Dock Co. incorporated with \$5000 capital stock by T. A. Rowand, Bellevue, Pa.; J. W. Barber, Thornburg, Pa.; E. D. Whitman, Pittsburg, Pa., and others.

W. Va., Wheeling—Gas.—City contemplates establishment of water-gas plant; will repair meters and service pipes; appropriation, \$110,000.

W. Va., Wheeling—Drugs.—Vitex Company incorporated with \$50,000 capital stock by C. W. Ulfert, C. H. Sensensy, J. M. Crane and B. B. Dovener.

RAILWAY SHOPS, TERMINALS, ROUNDHOUSES, ETC.

Ga., Augusta.—Augusta-Alken Railway & Electric Co., C. C. Tegethoff, president, contemplates constructing machine and car shop.

Okla., Chickasha.—Chickasha Terminal Co., H. H. Fitzgerald, chief engineer, Purcell, Okla., will construct terminal facilities, including \$25,000 station.

Okla., Lawton.—St. Louis & San Francisco Railroad, M. C. Byers, chief engineer, St. Louis, Mo., is preparing to erect machine shops and roundhouse at Lawton.

Tex., Sweetwater.—G. W. Harris, chief engineer of construction Gulf, Colorado & Santa Fe Railway, advises that company is not prepared to announce plans for roundhouse, etc., recently reported.

ROAD AND STREET IMPROVEMENTS

Ala., Mobile.—Board of Public Works approved estimates submitted by Wright Smith, engineer, for paving Water St. with concrete, to cost \$6400, and ordered that bids be invited; Mr. Smith also submitted estimates for paving, guttering and draining Spring Hill Ave., Broad St. and Davis Ave., estimated to cost \$179,000, and will prepare plans so as to include other streets, making total cost about \$255,000. (Recently mentioned. See "Machinery Wanted.")

Ark., Pine Bluff.—City awarded contract to E. J. Wetterstrom, Chicago, Ill., at about \$85,000 for paving Walnut and Olive Sts. and portion of Third Ave. with creosoted wood blocks.

Fla., Jacksonville.—Duval county will resurface 25 miles of road; bids to be opened January 5; F. J. Hyde, chairman County Commissioners; Gall L. Barnard, County Engineer. (See "Machinery Wanted.")

Ga., Macon.—City voted \$100,000 bond issue for paving. Address The Mayor. (Previously mentioned.)

La., New Orleans.—W. J. Hardee, City Engineer, recommended to Committee on Finance following bids: For construction of sub-surface drainage and neutral ground curb in Zacharie Park, in Toledano St., Bancroft & Ross, at \$6067.54; repaving Callopie St. with existing granite block, Standard Paving & Construction Co., at \$9652.90; banqueting Calhoun St., C. Hyland & Co., at \$6990.73; paving of Octavia St. with granite, Thomas Egan, at \$24,432.10; R. S. Blome Company, Chicago, Ill., at \$327,988, for paving St. Claude St. with granite.

Md., Federalburg.—Caroline County Commissioners, Denton, Md., will grade and macadamize 1.55 miles of Federalburg-Nichols road; bids opened December 14; I. L. Derkes, clerk.

Miss., Meridian.—Lauderdale County Commissioners considering issuance of bonds for road construction.

Miss., Scranton.—Jackson County Supervisors awarded contract to Davis & Thompson of Scranton and Montgomery, Ala., at \$304 per mile to construct and maintain for two years road H in District No. 3, from Scranton to Alabama State line; distance, 13 miles.

N. C., Durham.—City will open bids December 20 for grading three streets; excavation, 20,000 cubic yards. Address The Mayor. (See "Machinery Wanted.")

N. C., Greensboro.—Guilford county will construct model road at cost of \$1000. Address County Commissioners.

N. C., New Bern.—City will pave 48,000 square yards of street with brick, cement filler; brick, sand filler; bitulthic and asphalt macadam; bids to be opened January 4; F. T. Patterson, City Clerk. (See "Machinery Wanted.")

Okla., Chandler.—T. M. Speicher of Chandler (recently noted to have received road contract for District No. 1, Lincoln county) advises that hard-surface road, with asphalt-macadam base, will be built, running 30½ miles east and west through the county; total amount of low bid, based on engineer's estimate, \$219,000; plans prepared under direction of Office of Public Roads, Washington, D. C., L. D. Barrows, assistant engineer in charge.

Okla., Oklahoma City.—City will grade, curb and pave certain alleys; vitrified brick paving; five-inch Portland cement concrete foundation; bids to be opened December 20; Bob Parman, City Clerk. (See "Machinery Wanted.")

Okla., Oklahoma City.—City will open bids December 20 for construction of sidewalk aprons; Bob Parman, City Clerk. (See "Machinery Wanted.")

Tenn., Knoxville.—Board of Public Works awarded contract to Moreland & Moses of Knoxville at 77 cents per square yard for laying concrete sidewalk on East Jackson Ave.

Tenn., Lexington.—Board of Aldermen adopted ordinance ordering property-owners along two miles of graded streets to construct concrete sidewalks; C. G. Gathings, Mayor.

Tex., Chapin.—Hidalgo county voted issuance of \$100,000 of bonds for road construction. Address County Commissioners.

Tex., Childress.—City is considering bond issue for street paving; proposed to pave Main and 2d Sts. distance of three blocks, etc. Address The Mayor.

Tex., Richmond.—Fort Bend county will vote January 1 on issuance of \$150,000 of bonds for road construction in District No. 3. Address County Commissioners.

Tex., San Augustine.—San Augustine county contemplates construction of 25 to 30 miles of road within next 12 months; cost \$5000; W. C. Ramsey, county judge.

Va., Norfolk.—Bids will be opened December 14 for work and material required for repairing and keeping in repair for one year roads and bridges embraced in Western Branch and Tanner's Creek Magisterial Districts; F. L. Portlock, road engineer, 240 Monticello Arcade, Norfolk. (See "Machinery Wanted.")

Va., Nottoway.—Nottoway County Supervisors petitioned Walter A. Watson, County Judge, to order election for voting on issuance of \$80,000 of bonds for road improvements.

Va., Portsmouth.—Street committee will recommend to City Council issuance of \$200,000 of paving bonds.

Va., Waynesboro.—Work will probably begin about February on construction of proposed macadamized road over Blue Ridge Mountains; length, 10 miles; cost, \$45,000 per mile. Address J. E. Cook, Mayor of Waynesboro.

SEWER CONSTRUCTION

Fla., St. Augustine.—City contemplates voting on issuance of bonds to construct sewer system; estimated cost \$100,000. Address The Mayor.

Ga., Macon.—City voted \$100,000 bond issue for sewer construction. Address The Mayor. (Previously mentioned.)

Ky., Louisville.—Commissioners of Sewerage, Equitable Bldg., will open bids December 24 for construction of Jane St. sewer, Contract No. 59, and December 31 for construction of section "F," Beargrass Interceptor, contract No. 60; J. B. F. Breed, chief engineer. (See "Machinery Wanted.")

Ky., Lexington.—City awarded contract to Thomas O'Day of Lexington to construct sanitary sewer on East 5th St.

Md., Baltimore.—City awarded contract to David Peoples, 231 Calvert St., Baltimore, at about \$108,000 to construct lateral sewers, contracts Nos. 44 and 45; former will call for 25,000 linear feet vitrified-pipe sewers, 8 to 15 inches diameter, and 12,000 linear feet 6-inch house connections; latter, 27,000 linear feet vitrified-pipe sewers, 8 to 24 inches diameter, and 12,000 linear feet 6-inch house connections; Calvin W. Hendrick is chief engineer Sewerage Commission, American Bldg.

Miss., Charleston.—City will improve water-works, electric-light plant and sewer system; will issue \$10,000 of bonds. Address The Mayor.

Mo., Joplin.—O. F. Lichliter, City Clerk,

will receive bids until December 28 for construction of West Joplin sanitary sewer, including "D" street and Smelter Hill sewer; Guy T. Humes, Mayor. (See "Machinery Wanted.")

Mo., Columbia.—City will construct 50,000 feet of district sewers; City Engineer is preparing plans; John S. Bicknell, City Clerk.

Mo., Vandalia.—City voted \$25,000 for sewerage and water-works. Address The Mayor.

Okl., Anadarko.—City will construct combined storm and sanitary sewer system; bids to be opened December 21; Southwestern Engineering Co., Lee Bldg., Oklahoma City, Okla., is engineer. (See "Machinery Wanted.")

Okl., Oklahoma City.—City will open bids December 27 for construction of sanitary main sewer, consisting of lines B, D and E; Bob Parman, City Clerk. (See "Machinery Wanted.")

Okl., Oklahoma City.—City will open bids December 20 for construction of main storm sewer on McKinley Ave., 34th St. and Classen Blvd.; also for sanitary lateral sewer in Brauer Heights Addition; Bob Parman, City Clerk. (See "Machinery Wanted.")

Okl., Oklahoma City.—City awarded contract to Tulsa Engineering & Construction Co., Tulsa, Okla., to construct certain sewers in Deep Fork Addition.

S. C., Columbia.—City will construct 68-inch storm sewer distance of 542 feet; bids to be opened December 20; F. C. Wyse, City Engineer. (See "Machinery Wanted.")

Tenn., Knoxville.—Board of Public Works awarded contract to Long & Price of Knoxville to construct 18-inch storm sewer on South 9th St.

Tenn., Morristown.—City will vote January 15 on issuance of \$40,000 of bonds for construction of sewer system; John Carriger, Mayor. (Recently mentioned.)

Tex., Childress.—City is considering bond issue for sewer construction. Address The Mayor.

Tex., Corsicana.—City Council passed ordinance authorizing issuance of \$20,000 of bonds to extend sewer system. Address The Mayor.

Tex., Houston.—F. L. Dormant, engineer, of Houston is completing plans and specifications for proposed sanitary sewers to be laid through Second and portion of Third ward.

Tex., Palestine.—City Commissioners are considering construction of 15,000 additional feet of sewer pipe. Address The Mayor.

TELEPHONE SYSTEMS

Ky., Hickman.—Hickman Independent Telephone Co. organized with Tom Dillon, Sr., president, B. T. Davis secretary, Allen Davis manager.

Mo., Chilhowee.—Chilhowee Telephone Co. incorporated by J. E. Cahill, S. R. Sweeney, C. H. Gaines and others.

Okl., Komalty.—Komalty Telephone Co. incorporated with \$2500 capital stock by Louis Fischer, J. W. Hinton, H. H. Williamson and others.

Okl., Ponca.—Bois De Arc Valley Telephone Co. incorporated with \$6000 capital stock by C. G. Crawford, B. F. Coats and H. E. Copeland.

S. C., Dovesville.—Dovesville Telephone Co. incorporated by W. C. Gandy, A. L. Flowers and others.

Tenn., Elbridge.—Elbridge Telephone Co. incorporated by S. E. Carpenter, H. K. Huey, J. J. Puckett and others.

Tenn., Flatcreek.—Flatcreek Telephone Co. incorporated with \$3000 capital stock by J. W. Frost, Ira Stevens, J. J. Hix and others.

Tex., Orange.—Orange Home Telephone Co. incorporated with \$40,000 capital stock by William D. Dean, John B. Fletcher, Huga L. Runkle, Alen Edwards and others.

TEXTILE MILLS

Ga., Athens.—Cotton Yarns.—Star Thread Mills will double capacity and arrange for operation by electricity transmitted from water-power of Barnett Shoals, on Oconee River, which is to be developed by James White (owner of Star plant) and associates; now has 7000 ring spindles.

Ga., Atlanta.—Sheeting, etc.—Asa G. Candler, Sr., and Asa G. Candler, Jr., purchased Witham Cotton Mills at Hartwell, Ga.; plan organization of \$250,000 company to remove plant to Atlanta and increase from 6000 to 12,000 spindles; equipment also includes 186 looms, dyeing and finishing machinery, etc.

N. C., River Falls, P. O. at Graham.—River Falls Cotton Mill Co., J. W. Menefee, president, has increased capital stock to \$250,000 and plans to build 10,000-spindle mill. (Not

2000 spindles, as recently erroneously noted.)

N. C., Roxboro.—Cotton Yarns.—Roxboro Cotton Mills will build steam-power plant; awarded contracts for 100-horse-power engine direct connected to 75-kilowatt electrical generator.

Tenn., Cleveland.—Hosiery.—Weiss Hosiery Mill (reported incorporated last month with \$25,000 capital) has organized with C. H. Weiss president and P. B. Mayfield secretary-treasurer; will erect brick building 50x150 feet, with addition for boiler and engine room; will install 50 footers, 10 loops, 1 sewing machine, dyeing equipment and steam-power plant.

Tex., Marble Falls.—Gingham, etc.—Granite Manufacturing Co. will install cotton-manufacturing machinery as lately noted; will have 800 looms for weaving ginghams, etc.; awarded contract for entire equipment to Whitfield & White, Charlotte, N. C.; will operate by electricity transmitted from water-power-electrical plant of Colorado River Power Co.

Va., Emporia.—Cotton Goods.—Meherrin Cotton Mills Co. incorporated with capital stock of \$100,000; G. B. Wood, president; W. R. Cato, vice-president; Pattle I. Wood, secretary-treasurer.

WATER-WORKS

Fla., Key West.—Bryan & Co. of Jacksonville, Fla., have contract, it is reported, at \$19,950, to construct concrete cistern at naval station; capacity, 1,500,000 gallons.

Ga., Cuthbert.—City will open bids December 20 for boring 10-inch artesian well. J. B. McCrary & Co., Empire Bldg., Atlanta, Ga., are engineers; D. A. McPherson, Mayor.

La., Hammond.—City will extend water mains four blocks. Address The Mayor.

La., Plaquemine.—J. F. Dunlap petitioned City Council for franchise for water-works.

Miss., Brookville.—City has negotiated \$7000 bond issue for construction of water-works. Address The Mayor.

Miss., Charleston.—City will improve water-works, electric-light plant and sewer system; will issue \$10,000 of bonds. Address The Mayor.

Miss., Gulfport.—Water Commission will open bids January 22 for boring necessary artesian wells and furnishing machinery for pumping same to provide supply of not less than 4,000,000 gallons per day of 24 hours; Hamilton Johnson, general manager, Jackson Water-works. (See "Machinery Wanted.")

Mo., Vandalia.—City voted \$25,000 for sewerage and water-works; test well is now being drilled. Address The Mayor.

N. C., Jonesboro.—Town Commissioners authorized \$15,000 bond issue to construct water-works. Address The Mayor.

N. C., Wilmington.—Water and Sewerage Commission, Charles W. Worth, chairman, will open bids January 12 for construction of brick power and filter-house, machinery foundations, rearrangement of machinery, building of radial brick stack, extensions to filter plant, reinforced concrete sedimentation basin and concrete storage reservoir. Hazlehurst & Anderson, Atlanta, Ga., and Wilmington, are consulting engineers. (See "Machinery Wanted.")

Okl., Broken Arrow.—City will open bids January 10 for construction of water-works system recently noted; cost \$37,000; plans by Archer & Rollins, Kansas City. Address C. A. Fox. (See "Machinery Wanted.")

Okl., Clinton.—City awarded contract to Stone Construction Co. of Clinton at \$7900 to construct filtration system for water-works; C. C. Smith, City Clerk. (Recently mentioned.)

Tenn., Johnson City.—City has not yet set date for opening bids for construction of gravity-system water-works previously described; W. M. Dunlap, Johnson City, City Engineer; W. G. Kilpatrick, Jackson City, Miss., consulting engineer; as previously stated, city voted \$375,000 for construction of water-works.

Tex., Allen.—Allen Water Co. incorporated with \$5000 capital stock by S. P. Brush, J. Wesley Young and J. M. Huguley.

Tex., Amarillo.—Amarillo Water, Light & Power Co. is proceeding with proposed improvements to water-works to cost about \$100,000; has sunk four wells and received final shipments of pipe, fire hydrants and engine.

Tex., Childress.—City is considering issuance of \$10,000 of bonds to complete water-works. Address The Mayor.

Tex., Hubbard.—J. E. Clonch purchased water-works and is making improvements, is now building second storage tank.

Tex., Fort Worth.—National Machinery Co. of Oklahoma City is lowest bidder at \$65,

307.56 for 30 miles of pipe for dual water system and various extensions; bids included 61,215 feet six-inch pipe, 22,950 feet eight-inch pipe, 12,700 feet 10-inch, 3000 feet 12-inch, 800 feet 16-inch and 4500 feet 12-inch, together with 77 tons of fittings. W. J. Gilvin is commissioner of finance and revenue. (City lately mentioned as having voted \$375,000 bond issue for extension of water-works.)

Tex., Lubbock.—City will expend about \$50,000 in extension of water-works and sanitary sewer recently mentioned; will erect one three-story brick building, 50x115 feet; one two-story brick building, 50x115 feet; A. Leon Dalton, Lubbock, engineer in charge; will open bids after first of year.

W. Va., Wheeling.—Glendale Water Co. incorporated with \$25,000 capital stock by W. H. Koch and R. B. McMeichen, both of Glendale; J. M. Schaub, J. E. Roberts, Moundsville, W. Va., and others.

WOODWORKING PLANTS

Ga., Augusta.—Furniture.—Empire Furniture Co. incorporated with \$5000 capital stock by H. C. Martin, R. H. Stephens and W. B. Tinsley.

Ga., Dawson.—Sash, Doors, etc.—Variety Works Co. contemplates installation of machinery to manufacture sash, doors and blinds. (See "Machinery Wanted.")

Ga., Rome.—Barrel Heads.—Rome Cooperage Co. incorporated with \$10,000 capital stock by W. M. Towers, J. J. Seay, H. E. Kelley and J. H. Taylor; will erect building and equip for manufacturing barrel heads.

La., Head of Island.—Handles.—A. L. Way, Hammond, La., is preparing to establish handle factory.

La., New Orleans.—Excelsior Plant.—John W. Joachim, 601 Louisiana Ave., contemplates erection of excelsior plant. (See "Machinery Wanted.")

N. C., Brickton.—Furniture.—J. Frank Pate contemplates establishing mission furniture factory. (See "Machinery Wanted.")

N. C., Lenoir.—Table Slides.—Lenoir Table Rim Co., Lenoir, N. C., contemplates installing machine to manufacture table slides. (See "Machinery Wanted.")

N. C., Montezuma.—Montezuma Bobbin Co. (recently reported incorporated with \$25,000 capital stock) awarded contract to Chas. E. Harris, Montezuma, for erection of building; 112x90 feet; ordinary construction; cost \$4000; plans by D. V. Myrick, Montezuma; cost of machinery (purchased), \$7000; will manufacture bobbins and skewers; daily capacity, 4000 each; C. F. Blalock, president; R. H. Leonard, vice-president; D. J. Cook, secretary and treasurer. (See "Machinery Wanted.")

N. C., Spring Hope.—Desks, Tables, etc.—Nash County Manufacturing Co., J. J. Sanders, president (recently noted to rebuild plant), manufacture desks, tables, etc.; also rough and dressed lumber and building material; will erect building costing from \$1000 to \$1500; construction probably by company; may install some new machinery. (See "Machinery Wanted.")

Tex., San Marcos.—Woodworking, etc.—Howard Woodall and others will establish woodworking plant and showcase factory. (See "Machinery Wanted.")

Va., Emporia.—Carriages.—Southern Carriage Works, W. S. Drewry, president, is proceeding with installation of machinery for carriage building and repair shops; buildings erected. (Previously reported.)

BURNED

Ala., Bessemer.—Nathan Moore's dwelling; Mr. Harman's residence.

Ala., Birmingham.—Birmingham College's dormitory building at Owenton; estimated loss, \$7000.

Ala., Thomaston.—Thomaston Gln & Warehouse Co.'s cotton gin; loss \$10,000.

Ala., Tuscaloosa.—Tuscaloosa College and Conservatory's music hall; Barney Thompson, president.

Ga., Augusta.—Frank Fleming's residence; loss \$10,000.

Ga., Augusta.—Interstate Ice & Fuel Co.'s cooling tower; estimated loss, \$10,000.

Ga., Fairburn.—W. T. Roberts & Co.'s warehouse.

Ga., Sylvester.—J. O. McWhorter's residence; loss \$11,000.

Ky., Butler.—J. G. Galloway's stable; G. E. Smith's store and dwelling; E. F. Nehring's drug store; Mrs. M. Perry's residence; J. A. Askew's residence.

La., Crowley.—Toler Lumber Co.'s office, warehouse and store; loss on buildings, owned by Crowley State Bank, \$6300.

La., Richland.—R. W. Hawthorn's Richland Gln; loss \$6000.

La., Ruston.—The Price Block, owned by Mrs. A. A. Price; loss \$15,000.

Md., Baltimore.—Stern & Co.'s store at 317-319 North Howard St., loss on building, owned by Michael F. McCormick, 402 Hawthorn Rd., Roland Park, \$50,000; Cohen & Hughes' store, loss on building, \$25,000.

Md., Piney Grove.—School building. Address Allegany County Commissioners, Cumberland, Md.

Miss., Brandon.—Busick's Mineral Well Hotel; estimated loss, \$14,000.

Miss., Greenville.—J. H. Leavenworth's sawmill.

Miss., Greenville.—Reynolds Tile & Drainage Co.'s plant at Tile; loss \$3500.

Miss., Scranton.—Mrs. J. C. Lourendine's residence; loss \$2500.

Mo., Salem.—Eaves & Arthur's building; Salem Drug Co.'s building; McSpaden & Bennett's store; Tyrell & Co.'s store; Salem Hotel; J. E. Bittick's building; estimated loss \$100,000.

N. C., Mill Spring.—Wade Hampton's cotton gin and grist mill; loss \$500.

Okl., Clearview.—Weletka Cotton Oil Co.'s cotton gin.

Okl., Lawton.—Robert Truitt's residence; loss \$5000.

Okl., Morris.—First National Bank building; loss \$9000.

S. C., Anderson.—E. H. Acker's store; loss on building, owned by Mrs. Josie Peoples, \$4000.

S. C., Charleston.—Martin Hardware Co.'s warehouse; Rhodes Furniture Co.'s warehouse.

S. C., Columbia.—Southern Railway's car shops; loss \$25,000; W. H. Wells, chief engineer construction, Washington, D. C.

Tenn., Clarksburg, R. F. D. from Yuma.—Jamison, Tosh & Brandon's cotton gin; loss \$2000.

Tex., Cannon, R. F. D. from Van Alstyne.—J. F. Cantrell's cotton gin; loss \$4000.

Tex., Palmetto.—Palmetto Lumber Co.'s plant; loss \$30,000.

Tex., Terrell.—S. W. Garrison's residence; loss \$5000.

Tex., Terrell.—Allen Hotel; W. Garrison's residence; loss \$5000.

Va., Bluemont.—Bluemont Milling Co.'s flour mill; loss \$12,000.

Va., Pulaski.—Pulaski Foundry and Machine Works; loss \$5000.

Va., Fredericksburg.—Virginia Shirt Co.'s plant; loss \$100,000.

Va., Pulaski.—Garmor-Hunt Bldg., containing stores, opera-house and offices; loss \$50,000.

W. Va., Bristol.—Bristol Carbon Co.'s engine-house and power plant; loss \$4000.

W. Va., Morgantown.—Otterson Wagon Co.'s plant; loss \$8000.

W. Va., Romney.—George Cunningham's cannery; loss \$2500.

W. Va., Wheeling.—Court Theater Bldg.; loss \$250,000; owned by Board of Trade.

WRECKED BY EXPLOSION

Fla., Gainesville.—Union Phosphate Co.'s plant at Tloga.

BUILDING NOTES

APARTMENT-HOUSES

Va., Portsmouth.—E. L. Lash will erect apartment-house; two stories; brick and stone; four apartments of four rooms each and bath; construction begun.

BANK AND OFFICE BUILDINGS

D. C., Washington.—District National Bank, Robert N. Harper, president, 1415 G St. N. W., has not yet selected plans for bank building recently noted; 38 feet 5 inches by 75 feet; fireproof construction; steam heat; electric lighting; electric elevator; cost \$100,000.

La., Baton Rouge.—First National Bank and People's Trust and Savings Bank will open bids in about 60 days for erection of bank building recently noted; one story and basement; 36x80 feet; terra-cotta exterior; ornamental metal work; reinforced concrete construction; direct steam heat; electric lighting; cost \$35,000; bronze and marble fixtures; reinforced concrete burglar-proof vaults; plans by W. L. Stevens Company, 1109 Hennen Bldg., New Orleans, La.; construction, probably by subcontracts, awarded

by building committee appointed by the two banks. (See "Machinery Wanted.")

N. C., Ansonville.—Recently organized bank, L. L. Little, president, will erect building. (See "Machinery Wanted.")

N. C., Hendersonville.—People's National Bank awarded contract at \$25,000 to Edwards & Blythe, Hendersonville, for erection of two-story-and-basement bank and office building recently mentioned; stone and pressed-brick front, reinforced concrete; steam heat; electric lighting; plans by R. S. Smith, Asheville, N. C. (See "Machinery Wanted.")

Okl., Grainola, P. O. Salt Creek.—Grainola State Bank will erect two-story brick 25x50-foot bank building; desires correspondence with architects; address (until January 15) Keeney Bros., Newkirk, Okla. (See "Machinery Wanted.")

Okl., Oklahoma City.—Levy Bros. will erect two office and store buildings; one eight stories, 75x100 feet, and other six stories; fireproof; steel construction; total cost between \$375,000 and \$400,000.

S. C., Bennettsville.—Marvin Adams awarded contract to B. F. Hart, care of Ernest V. Richards, Bennettsville, S. C., for erection of office building; two stories; 50x60 feet; brick; pressed-brick front; electric lighting; cost \$5500; plans by Ernest V. Richards.

Tenn., Erwin.—Bank of Erwin awarded contract to Stansberry & Co., Knoxville, Tenn., to erect bank and office building; 25x70 feet; two stories; brick; concrete foundation and vault. (Recently mentioned.)

Tenn., Knoxville.—Knoxville Leasing Co., C. B. Atkin, president, has tentative plans by Edward Okel, Montgomery, Ala., for office building either 5 or 12 stories high; site 130x100 feet; also probable that for present building now on site will be enlarged.

Tex., Dallas.—Exporters' Realty Co. incorporated to erect Dallas Cotton Exchange; seven stories; 132x164 feet; S. W. King, Jr., is president, F. F. Webster vice-president, M. H. Wolfe treasurer and A. H. Cleaver secretary.

Tex., Spur (not a postoffice).—Bank of Spur, R. V. Colbert, Stamford, Tex., president, awarded contract to Holderness & Oates, care of Bank of Spur, for erection of two-story brick bank and office building; fireproof; 30x165 feet; steam heat; cost \$30,000; plans by Elmer G. Withers, Stamford.

Va., Norfolk.—Norfolk & Portsmouth Traction Co. will enlarge office building.

Va., Roanoke.—Southwest Virginia Trust Co. has plans by Huggins & Bates, 609 Strickland Bldg., Roanoke, for remodeling of banking-room at cost of \$8000.

Va., Vinton.—People's Bank, C. C. Thomas, president, will erect bank building; three stories; brick.

CHURCHES

Ala., Tusculum.—Christian congregation will, it is reported, erect edifice. Address The Pastor, Christian Church.

Ark., Batesville.—Presbyterian Church, Jas. P. Coffin, chairman building committee, has not yet selected architect to prepare plans for edifice recently mentioned; brick or stone structure; about 70x85 feet; probably steam heat and electric lighting; cost \$10,000; bids to be advertised; Rev. Cochran Preston, pastor.

D. C., Washington.—Christian Science congregation is having plans prepared by Edwin D. Ryerson, office of Surveying Architect of Treasury, Washington, for edifice; marble and terra-cotta; front finished in Vermont marble, with brick and terra-cotta sides and backs; site 132x150 feet; cost \$125,000.

Md., Baltimore.—Mount Sinai Baptist congregation, 810 Ashland Ave., purchased site 44x77 feet at Neighbor and Hillman Sts., on which it is reported to erect edifice.

Md., Denton.—Brethren Church, Geo. A. McDaniel, secretary, has not yet selected architect or made definite plans for edifice recently mentioned; will probably erect brick or concrete 40x60-foot structure, with hot-air heat and gas lighting.

Mo., Kansas City.—Independence Boulevard Christian congregation secured additional site on which to erect annex to edifice; three stories; contain gymnasium, swimming-pool, assembly-room with seating capacity of 2500, and so arranged that it may be divided into 25 classrooms, etc.; plans prepared; cost between \$50,000 and \$100,000. Address The Pastor, Independence Boulevard Christian Congregation.

N. C., Wilmington.—Church of Good Shepherd will erect brick edifice. Address The Pastor, Church of Good Shepherd.

Okl., Mangum.—First Baptist Church, J. L. H. Hawkins, pastor, awarded contract to G. Miller, Mangum, for erection of edifice;

89x89 feet; Ionic buff brick; basement red granite; mill construction; steam or hot-water heat; electric lighting; cost \$30,000; plans by Sparger & Peters, Bonham, Tex. (Previously reported.)

Okl., Tulsa.—First Presbyterian Church accepted plans by Waller, Shaw & Fields, Fort Worth, Tex., for proposed edifice; 100x140 feet; basement; foundation of concrete and veneered with Bedford stone; main superstructure of brick, with Bedford stone trimmings; two stairways on exterior to be of reinforced concrete and granite, as well as stair casings; buttresses of main entrance to be surmounted with terra-cotta tile; roof surmounted with copper dome; auditorium and Sunday-school room to have total seating capacity of 1250; two colonnaded porticoes to extend around structure; estimated cost \$40,000.

Okl., Oklahoma City.—First Presbyterian Church, Rev. Phil Baird, pastor, acquired site 125x140 feet, on which it is proposed to erect edifice costing about \$100,000.

S. C., Columbia.—First Presbyterian Church will erect Sunday-school building; S. B. McMaster, chairman building committee; will open bids about January 1; size of building about 75x150 feet; cost within \$16,000.

S. C., Pine Grove, Marlboro County (not a postoffice).—Pine Grove M. E. Church had plans prepared by Ernest V. Richards, Bennettsville, S. C., for \$6000 edifice; auditorium 42x42 feet; Sunday-school room 32x24 feet; frame; hot-air heat; electric or acetylene-gas lighting. (See "Machinery Wanted.")

Tex., Corpus Christi.—M. E. Church South has plans by Flanders & Flanders, 147 South Pearl St., Dallas, for proposed \$60,000 edifice.

Va., Salem.—Episcopal Church is having plans prepared by Huggins & Bates, 609 Strickland Bldg., Roanoke, Va., for \$15,000 edifice. Address The Pastor.

W. Va., Madison.—Missionary Baptist Congregation will erect brick church; estimated cost \$3500. Address The Pastor, Missionary Baptist Church.

COURTHOUSES

Tenn., Dyersburg.—Dyer county, Geo. S. Weakley, chairman commissioners, has not yet selected architect to prepare plans for erection of courthouse; fireproof construction; cost \$50,000; will probably open bids early in 1910. (Previously noted.)

Tex., Gainesville.—Cooke county, C. R. Pearman, County Judge, has not set date of opening bids for erection of courthouse recently mentioned; brick and stone; fireproof structure; 160x119 feet; steam heat; electric lighting; cost \$125,000 to \$135,000; architects, Lang & Wittich, Dallas, Tex.

DWELLINGS

D. C., Washington.—B. Stanley Simmons, 331 F St. N. W., will erect residence at Con necticut and Cathedral Aves.

D. C., Washington.—George C. Pumphrey, 114 7th St. S. W., and George N. Palmer purchased for \$33,000 site on Clifton St., Columbia Heights, and will erect number of dwellings; 21½x34 feet; brick; ordinary construction; hot-water heat; electric lighting; cost \$5000 each; plans by W. E. Howser, Park Apartment, Washington; construction by owner; company will also erect 10 dwellings on Clifton St. N. W., between 10th and 11th Sts.

D. C., Washington.—James R. Ellerson, 607 14th St. N. W., and W. E. Pickford will let subcontract for erection of dwellings recently noted; one building 18x50 feet; four buildings 18x34 feet; five buildings 20x32 feet; two 15x46 feet; also three 15x46 feet; store in one dwelling; furnace heat; gas lighting; cost within \$3800 each; plans by A. H. Bennis, 1342 New York Ave., Washington, for 10 dwellings, and by Julius Wenig, 1323 F St. N. W., Washington, for five dwellings.

Fla., Jacksonville.—H. R. Finn will erect 10 dwellings; two stories; frame.

Ga., Chickamauga.—James Blaylock is receiving proposals for erection of residence.

Ga., Cochran.—J. J. Taylor reported to erect two-story residence.

Ga., Cochran.—Dr. T. D. Walker reported to erect two dwellings.

Ga., Columbus.—George B. Phillips awarded contract to Cooper Lumber Co., Columbus, for erection of dwelling; two stories; frame; cost several thousand dollars.

Md., Baltimore.—Joseph A. Neugebauer awarded contract to Saratoga Improvement Co., Baltimore, for erection of dwelling at Forest Park Highlands; plans by Clarence E. Anderson, Law Bldg., Baltimore.

Md., Baltimore.—Chas. R. Becker, 420 North

Carey St., will not erect dwelling. (Recently incorrectly mentioned.)

Md., Baltimore.—Edward J. Gallagher Realty Co., Lakewood and Eastern Aves., will erect 34 dwellings; 16 on Chesapeake St., 13x44 feet; cost \$24,000; 12 on Milton Ave., 13x44 feet, cost \$30,000, and 6 on Glover St., 12x28 feet, cost \$3000; tin roofs; furnace heat; brick; two stories.

Md., Baltimore.—Beaufort Realty Co., Courtland Bldg., purchased 49 acres of land adjoining Electric Park, and will probably improve with two-story dwellings.

Md., Baltimore.—Downing & Murphy, Franklin Ter. and Old York Rd., have plans by J. S. Downing, 602 41st St., Baltimore, for three dwellings on Franklin Ter.; two stories; brick; 15x50; porches; Carey roofing; hot-water heat; ordinary construction; gas and electric lights; cost \$7500; construction by owners.

Md., Baltimore.—Frank Roth will erect four two-story frame tenements (eight dwellings) and one detached two-story frame dwelling; cost \$7800.

Mo., St. Louis.—George F. Bergfeld Investment & Construction Co. will erect 10 dwellings; seven rooms; two stories; brick; cost \$10,000 each.

S. C., Hampton.—Mrs. M. B. McSweeney has plans by G. Lloyd Preacher, Dyer Bldg., Augusta, Ga., for remodeling of two two-story frame dwellings; will let contract about January 1.

Tenn., Chattanooga.—J. E. Edington, care of Security Bank & Trust Co., Broad and West 7th Sts., will erect five one-story frame shingle-roof dwellings at Churchville (suburb); cost \$5000; construction superintended by C. A. Vest, contractor, 2807 Henderson Ave., East Chattanooga, as foreman for owner.

Tenn., Hill City.—W. G. Bushnell, care of Chattanooga Vulcanizing & Rubber Co., 115 West 6th St., awarded contract to C. H. Brown & Co., 203 McClung Ave., Orange Grove, Chattanooga, for erection of \$3000 dwelling on Cowart St.; six rooms; one story; frame; shingle roof; brick foundations; concrete steps and walk; stained hard pine interior finish; electric lighting.

Tenn., Hill City.—T. Wild, 121 Mississippi Ave., will erect dwelling; two stories and basement; brick; slate roof; concrete basement and porch floors; stained hard pine interior finish; cabinet mantels; electric lighting; cost \$4000; construction by owner.

Tenn., Memphis.—A. Y. Allen awarded contract to N. J. Baskin, Memphis, for erection of dwelling; two stories; stone veneer; eight rooms; slate roof; cost \$5000.

Tenn., Memphis.—A. S. Blanton awarded contract to N. J. Baskin, Memphis, for erection of dwelling; two stories; nine rooms; brick and stone veneer; cost \$6000, exclusive of light and heat.

Tenn., Nashville.—R. C. Ewing, Columbia, Tenn., has plans by R. S. Marr, Nashville, for erection of dwelling recently noted; 44x60 feet; brick; hot-water heat; gas and electric lighting; cost \$7000; will open bids December 28.

Tex., Center.—W. H. Paxton will erect residence; six rooms and hall; ordinary construction; gas; hot-air heating plant to cost \$100; cost of building, \$25,000; plans and construction by owner.

Tex., Dallas.—H. Grossman will erect dwelling; three stories and basement; brick and stone; 25x90 feet; cost \$20,000.

Tex., San Antonio.—T. C. Frost will erect \$27,000 dwelling.

Tex., San Antonio.—George Roe will erect dwelling on Beacon Hill.

Tex., Victoria.—Thomas P. Traymore will erect \$10,000 residence.

Tex., Victoria.—Louis N. Hofer will erect two-story residence.

Tex., Victoria.—Ben W. Fly will erect \$5000 residence.

Tex., Victoria.—W. H. Brantley will erect two-story residence.

Va., Norfolk.—J. E. Barry awarded contract to J. D. Anders, 23 Essex Bldg., Norfolk (recently noted as lowest bidder) for erection of eight dwellings; mill construction; hot-air heat; electric lighting; cost \$22,000; plans by B. F. Mitchell, Seaboard Bank Bldg., Norfolk.

Va., Richmond.—George D. Priddy will erect dwelling; two and a half stories; brick.

Va., Richmond.—Mrs. Barton H. Wise awarded contract to O. B. Slaughter, Richmond, for erection of dwelling; three stories and basement; cost \$22,000; plans by Noland & Baskerville, Richmond.

Va., Richmond.—C. M. Eddington will erect dwelling; two stories; brick; cost \$4000.

Va., Roanoke.—I. J. Meals has plans by Huggins & Bates, 609 Strickland Bldg., Roanoke, for \$6500 tenement-house.

Va., Roanoke.—C. A. Berry has plans by Huggins & Bates, 609 Strickland Bldg., Roanoke, for \$5000 dwelling.

GOVERNMENT AND STATE BUILDINGS

Ark., Little Rock.—Capitol.—State Capitol Commission awarded contract at \$35,718 to William Miller & Sons Company, Pittsburg, Pa., for completing State Capitol; work to include construction of dome, entrance, steps and general interior finish; plans by Cass Gilbert, 11 East 24th St., New York; George W. Donaghey, Governor, is ex-officio chairman of commission. (Lately noted.)

Fla., Tampa.—Laboratory.—Dekle & McGucken of Tampa have contract at \$15,674 for erection of branch State laboratory; two stories and attic; waterproof; 42x80 feet; pressed brick; granite trimmings; tile roof; first floor and half second will be paved throughout with parazzo; plans and specifications by Shaw & Jay, American National Bank Bldg., Tampa. (Recently mentioned.)

N. C., Henderson.—Postoffice.—Bids will be received at office of James Knox Taylor, Supervising Architect, Treasury Department, Washington, D. C., until January 17 for construction (including plumbing, gaspiping, heating apparatus, electric conduits and wiring) of United States postoffice at Henderson, in accordance with plans and specifications, copies of which may be obtained from custodian of site at Henderson or at above office, at discretion of architect.

Okl., Oklahoma City.—Postoffice.—M. Gill Construction Co., Ardmore, Okla., lowest bidder at \$215,500 for erection of United States postoffice; James Knox Taylor, Treasury Department, Washington, D. C., Supervising Architect. (Recently noted.)

Va., Fort Monroe.—Storehouse.—Bids will be received until January 10 for construction, including plumbing, heating, electric wiring and fixtures, of engineer's storehouse at Fort Monroe. Plans and specifications may be seen in office of Chief Quartermaster, Department of East, Governor's Island, New York; deposit of certified check for \$25 required as guarantee to return plans and specifications; bidders on proposals to state names of manufacturers supplying material; information on application; Ernest R. Tilton, Capt. and Q. M., U. S. A., Const. Q. M.

Mo., Jefferson Barracks.—Barrack.—Bids will be received until December 21 for addition to band barrack; information on application. Address Capt. Stanley H. Ford, Quartermaster.

W. Va., Huntington.—Asylum.—State Board of Control, Charleston, W. Va., will let contract December 28 for erection of building at West Virginia Asylum; to accommodate 150 patients; 50x175-foot structure, with wing 50x70 feet; three stories; brick; steam blast furnace; cost within \$50,000; plans by H. Rus Warne, Charleston, W. Va.

HOTELS

Ala., Elkmont.—T. R. McWilliams, proprietor of McWilliams Hotel, will erect addition to hotel.

Ark., Blytheville.—Blytheville Hotel Co. awarded contract to McIlvain & Hays, care of Blytheville Hotel Co., for erection of \$30,000 hotel building recently noted; 100x140-foot structure; 40 rooms; plans by Ely & Weller, Memphis, Tenn.; steam-heat and plumbing contracts not let. (See "Machinery Wanted.")

Fla., Tampa.—Sanchez & Haya Real Estate Co. awarded contract to Hard Construction Co. of Tampa to erect hotel; two stories; 70x120 feet; reinforced concrete; water and fire proof.

Ga., Cochran.—T. A. Horn reported to erect 15-room hotel.

Ga., Savannah.—Forest City Hotel Co., Frank R. Durden, president, accepted plans by W. L. Stoddard of New York for hotel to occupy site of present "New Screen House"; 10 stories; 90x120 feet; fireproof throughout; frame either of reinforced concrete or skeleton steel construction with reinforced concrete floors; will contain 171 rooms, 39 private paths and 20 sample rooms; tile floors; marble wainscoting in main lobby and in other portions of building; provision will be made for bank; kitchen in basement will be furnished with independent fan ventilating system; lobby two stories high; dining hall will have seating capacity of 175 to 200; on 10th floor arrangements have been made for roof garden and convention hall seating from 350 to 450; steam heat; electric

lighting; electric elevators; telephones in every room; cost about \$300,000; architect has been instructed to proceed with working plans, and upon completion of these bids will be invited. G. Jaekel will be manager. (Previously mentioned.)

N. C., Concord.—Misanheimer Springs Hotel Co. Incorporated with \$50,000 capital stock by A. L. Patterson, R. L. Patterson and others.

N. C., Wilkesboro.—Brushy Mountain Iron & Litch Springs Co. Incorporated with \$125,000 capital stock by J. W. White and others; to erect hotels, etc.

S. C., Cheraw.—Julius W. Covington had plans prepared by Ernest V. Richards, Bennettsville, S. C., for \$45,000 hotel; 50-room brick structure; 141x51 feet; three stories; tin roof; stores on ground floor; hot-water pneumatic system heat; electric lighting; construction by day work. (See "Machinery Wanted.")

S. C., Chesterfield.—J. H. Melton had plans prepared by Ernest V. Richards, Bennettsville, S. C., for \$5000 hotel; 48x50 feet; first story, rough masonry; second story, shingle or half timber; probably steam heat; electric lighting; bids to be opened about February 1.

Tenn., Knoxville.—Atkin Company Incorporated with \$60,000 by C. B. Atkin, J. B. Brownlow, W. G. Brownlow, C. A. Stair and Howard Van Gilder.

Tex., Houston.—Richard Rogers, proprietor Capitol Hotel, is interested in remodeling Dunlap Bldg. as hotel; rear part of building, now two stories, will be made three stories, height of front portion; will contain 100 rooms.

MISCELLANEOUS STRUCTURES

Ala., Greensboro.—Jail.—Hale county will erect jail to replace present structure. Address County Commissioners.

Ala., Montgomery.—Lodge.—Grand Lodge Knights of Pythias, will erect Pythian Temple; J. B. Ellis, Selma, Ala.; J. Rivers Coker, Birmingham, Ala., and B. A. Taylor, Montgomery, building committee.

Ala., Tusculum.—Lodge.—Woodmen of the World will erect lodge building.

Ark., Dermott.—Business.—Mrs. B. A. Kimble will erect one-story pressed-brick business building; cost \$5000.

Ark., Little Rock.—Infirmary.—St. Vincent's Infirmary awarded contract at \$54,000 to M. O. Wendler, Little Rock, for erection of annex.

Ark., Pine Bluff.—Business.—Graham & McKenzie will erect business building.

Ark., Pine Bluff.—Business.—B. J. Altmeier, F. G. Bridges and William Nichel will erect business building.

Fla., Bronson.—Jail.—Levy County Commissioners will receive bids and consider letting contract January 8 for enlarging and supplying county jail with cells, according to plans and specifications on file at office of A. P. Hardee, County Clerk.

Fla., Tampa.—Jail.—Hillsborough County Commissioners will probably erect addition to county jail.

Ga., Atlanta.—Store.—Forrest and George Adair purchased site 101x250 feet and will erect store, five stories; arcade in center with glass roof and plate-glass windows.

Ga., Augusta.—Children's Hospital awarded contract at \$20,000 to H. C. Morrison, Augusta, for erection of proposed hospital building.

Ga., Columbus.—Business.—R. W. Massey, Birmingham, Ala., will erect business building; three or four stories.

Ga., Hawkinsville.—Business.—Branden & Dreyer Grocery Co. reported to erect business building on Houston St.

Ga., Sandersville.—Sanitarium.—Wm. Rawlings, J. H. Evans, O. L. Rogers and others are interested in organization of company to take over present sanitarium of Dr. Rawlings and erect new building; three stories; 25 rooms; steam heat; steam sterilizing system; own electric-light plant, laundry, etc.

Md., Arlington.—Stores and Dwellings.—J. B. Wallis & Son have plans by Stanislaus Russell, 2900 Clifton Ave., Baltimore, Md., for two stories and dwellings at Garrison and Main Aves.; one three stories, 20x50 feet; one two stories, 20x40 feet; steam heat; gas and electric lighting; brick construction; plate-glass store fronts; contractors estimating include William Brooks, Jack Staup, James L. Constantine, Arlington; Alexander W. Brown, North Ave., near Pennsylvania Ave.; Marvin H. Murray, 1700 North 10th St. west, and Thos. B. Stanfield & Son, 109-111 Clay St., all of Baltimore, Md.; bids opened.

Md., Baltimore.—Bandstand.—Riverview Amusement Co., Michael J. Fitzsimmons, les-

see, 2031 West Baltimore St., has plans by Otto G. Simonson, American Bldg., Baltimore, for bandstand to replace burned structure; Moorish design; constructed on piles; 2000 electric lights; contractors estimating include Charles L. Stockhausen, National Marine Bank Building; Henry S. Rippel, 1-7 Clay St.; John Cowan, 106 West Madison St.; John Hiltz & Sons Company, 3 Clay St.; William T. Murphy, Eutaw and McCulloh Sts., and John A. Sheridan, all of Baltimore. (Previously mentioned under "Miscellaneous Enterprises.")

Miss., Collins.—Store.—A. V. Easterling awarded contract to Burkes Bros. & Fleming for erection of store building recently noted; 30x110 feet; fireproof construction; electric lighting; cost \$4500; plans by owner.

Miss., Meridian.—Clubhouse.—Standard Club purchased site and will erect clubhouse; three stories; brick; terra-cotta and marble trimmings; cost \$30,000.

Mo., Kansas City.—Hospital.—German Hospital will erect addition to accommodate 90 patients; vitrified brick; concrete floors; heating apparatus and storage-room in basement; cost \$70,000.

Mo., Kansas City.—Dormitory.—Young Women's Christian Association accepted exterior plans by Owen & Payson, Kansas City, for proposed dormitory building; three stories; brick and cut stone; to accommodate 115 people; 69x108 feet.

N. C., Charlotte.—Association Home.—Young Women's Christian Association has plans by Hook & Rogers, Charlotte, for association home; brick or stone; three stories; cost \$45,000.

Okla., Okmulgee.—Business.—J. B. Jamison, Concord, N. H., contemplates erection of business building.

Okla., Oklahoma City.—Business.—J. W. Gillespie will erect two or three-story business building; site 55x100 feet.

S. C., Hampton.—Store.—J. S. Williams awarded contract to Knopf & O'Neal, Fairfax, S. C., for erection of store building; plans by G. Lloyd Preacher, Dyer Bldg., Augusta, Ga.

S. C., Hampton.—Store.—Mrs. M. R. McSweeney has plans by G. Lloyd Preacher, Dyer Bldg., Augusta, Ga., for remodeling three-story store and office building; pressed brick; plate glass; prism lights; tile floors; terra-cotta cornice and ornaments; gas lighting; will let contract about January 1.

Tenn., Knoxville.—Store, etc.—Dr. H. M. Green awarded contract to W. M. Gist and associates for erection of store and office building recently noted; 26x53 feet; brick; ordinary construction; steam heat; electric lighting; cost \$10,000; plans by Gredig & Lynn, Knoxville.

Tenn., Knoxville.—Knoxville Leasing Co. contemplates either remodeling Plaza block or erection of entirely new five-story structure on site; plans for latter by Edward Okel, Montgomery, Ala.

Tenn., Nashville.—Southern Express Co., Joe Holman, agent, has plans by Thos. Marr, Nashville, for stable to accommodate 50 horses and 25 wagons; each stall provided with ventilator; skylight in roof; cost \$6000.

Tex., Amarillo.—Lodge.—Elks' Lodge will erect lodge building; two stories and basement; cost \$35,000.

Tex., Childress.—Business.—R. E. Montgomery, Fort Worth, Tex., will erect two business buildings; one story; brick.

Tex., Dallas.—Home.—National Benevolent Association of Christian Church will shortly begin erection of proposed home for indigent old people.

Tex., Gilmer.—Temple, etc.—Masonic Lodge awarded contract to W. H. Pugh & Co. for erection of \$9000 building for Masonic Temple and bank purposes; two-story brick structure; electric lighting.

Tex., Marble Falls.—Masonic Temple, etc.—Blazing Star Lodge No. 413, A. F. & A. M., will erect \$6000 building; two stories; sandstone; size 30x90 feet; electric lighting; lower story for storehouse and printing; Masonic Hall above; plans by L. McClary, Llano, Tex.; C. F. Trousdale to superintend construction; Walter Nanney, superintendent of quarry work; will install printing outfit; A. F. Hicks, chairman finance and building committee. (Previously noted.)

Tex., Marlin.—Stable.—Frank Peacock and L. N. Stanley will erect stable building; brick; 66x120 feet.

Tex., McKinney.—Business.—J. P. Crouch will erect two-story brick business building.

Tex., Stamford.—Sanitarium.—Texas Central Railroad, C. Hamilton, general manager, Waco, Tex., is proceeding with erection of proposed branch sanitarium building; 17 rooms; brick and stone; cost \$15,000.

Tex., Victoria.—Business.—L. P. Leibold will erect one-story brick business block.

MUNICIPAL BUILDINGS

Miss., Brookhaven.—City Hall.—Board of Aldermen adopted resolutions issuing \$12,000 of bonds for erection of city hall and office building. Address The Mayor.

Okla., Oklahoma City.—Fire Station.—City awarded contract to Swatek & Parker, Oklahoma City, at \$32,986, to erect fire station. (Recently mentioned.)

Tenn., Chattanooga.—Auditorium.—City contemplates erection of auditorium with seating capacity for 6000; V. E. DeGeorgis, chairman of committee.

Tex., Houston.—Auditorium.—City has adopted plans by Mauran & Russell of Houston and St. Louis, Mo., for proposed fireproof auditorium; to be equipped for conventions; seating capacity 7000; to contain offices for city departments; structure 250x150 feet; Texas granite base; gray pressed brick and terra-cotta walls; two balconies extending around arena; portable seats; stage 50x50 feet; banquet hall 45x30 feet; reception and serving room, etc.; subway carriage entrance; 11 main exits 13 feet wide; also minor exits; ventilation; lighting; pipe organ; inclined walkways ("Ramps") to upper balcony; construction to begin at once.

Tex., Stamford.—Library.—Carnegie Library Board will open bids December 13 for erection of two-story-and-basement brick and stone library. For plans, specifications and information address Elmer G. Withers, architect, Stamford; deposit of \$35 will be required.

Va., Lynchburg.—Market and Auditorium.—Common Council concurred in resolution appropriating \$54,500 for erection of market-house and auditorium; 135x132 feet; brick; terra-cotta trimmings; auditorium to have seating capacity of 2000; plans by Frye & Chesterman of Lynchburg. (Previously mentioned.)

RAILWAY STATIONS

Ala., Anniston.—Louisville & Nashville Railroad, W. H. Courtenay, chief engineer, Louisville, Ky., will expend about \$16,000 on improvements to Union depot; plans decided on.

Ark., Wynne.—St. Louis, Iron Mountain & Southern Railway, E. F. Mitchell, engineer construction, St. Louis, Mo., purchased site on which to erect passenger station; pressed brick; cost \$24,000.

Md., Baltimore.—Pennsylvania Railroad Co., A. C. Shand, chief engineer, Broad Street Station, Philadelphia, Pa., will invite bids for erection of proposed \$500,000 station, but does not expect to have plans ready for at least three months; in meantime is asking bids on construction of retaining wall along Jones' falls. (Recently detailed.)

Mo., St. Louis.—Illinois Traction Co. secured permit for erection of passenger station; cost previously reported as \$40,000; H. E. Chubbuck, Peoria, Ill., is general manager.

Okla., Chickasha.—Chickasha Terminal Co., H. H. Fitzgerald, chief engineer, Purcell, Okla., will erect passenger station to cost \$25,000.

S. C., Greenville.—Charleston & Western Carolina Railway, A. W. Anderson, general superintendent, Augusta, Ga., has not yet definitely arranged for improvements recently mentioned; reported expenditure, about \$150,000.

Tenn., New Market.—Southern Railway, W. H. Wells, chief engineer construction, Washington, D. C., contemplates, it is reported, improvements to passenger depots in Eastern Tennessee, including New Market, Hodges and Morristown; plans for improvement of depot at Cleveland have been prepared and forwarded to Railroad Commission at Nashville for approval.

SCHOOLS

Ala., Birmingham.—Mercy Home and Industrial School for Girls will erect building, to cost from \$15,000 to \$20,000.

Ala., Birmingham.—Birmingham College, J. H. McCoy, president, will rebuild dormitory building at Owenton reported burned; loss \$7000.

Ala., Gadsden.—City contemplates expending between \$50,000 and \$75,000 for erection of one or two large schools and improvements to old buildings. Address The Mayor.

Ala., Tuscaloosa.—Tuscaloosa College and Conservatory, Barney Thompson, president, will rebuild music hall reported burned.

Ark., Leslie.—C. V. Ryno, president of School Board, will receive bids until December 27 for erection of brick school; certified

check for \$500; plans and specifications on file at office of Theo. M. Sanders, architect, 709 Southern Trust Bldg., Little Rock, Ark., and of C. V. Ryno, Leslie.

Mo., Columbia.—Board of Education, Columbia district, John L. Henry, secretary, will expend, respectively, \$100,000, \$80,000 and \$20,000 in erection of high-school and two ward school buildings recently noted; plans by W. B. Ittner, St. Louis, Mo.; will open bids December 20; plans and specifications on file at office of Board of Education and at office of W. B. Ittner, St. Louis, Mo.

Mo., St. Louis.—C. O. Brunk, St. Louis, at \$189,519, is lowest bidder for erection of proposed Ashland school; two stories; 22 rooms and kindergarten.

Miss., Kilmichael.—City awarded contract at \$4478 to E. L. Roberts, Mathison, Miss., for erection of proposed school; plans by McClanahan & Terry, Columbus, Miss.

Miss., Leakesville.—City is preparing to erect school; has sold \$7000 worth of bonds. Address The Mayor.

Miss., Rolling Fork.—Bids will be received until January 3 by George W. West, clerk of Board of Supervisors of Sharke county, for erecting school; bond for double amount of bid, with at least one good resident surety or a surety company authorized to do business in Mississippi; plans and specifications on file with the board.

Tenn., Chattanooga.—City appointed joint committee, with V. E. DeGeorgis, president of City Council, as chairman, to select architects and decide on expenditure of \$150,000 (previously noted) for school buildings and repairs; Board of Education recommends that \$20,000 be expended for new roofs, furnaces and other repairs to present school buildings; that \$130,000 be used for new school buildings, including eight-room school near East Main St.; six-room buildings in Ninth ward and at West 4th and Chestnut Sts., and 18-room school at McCallie Ave. and Douglas St.

Tenn., Johnson City.—State Board of Education, R. L. Jones, secretary, Nashville, Tenn., invites competitive plans from architects for East Tennessee State Normal School building recently noted; cost about \$200,000; will let contract about February 1.

Tenn., Memphis.—State Board of Education, R. L. Jones, secretary, Nashville, Tenn., invites competitive plans from architects for West Tennessee State Normal School building recently noted; cost \$400,000.

Tenn., Murfreesboro.—State Board of Education, R. L. Jones, secretary, Nashville, Tenn., invites competitive plans from architects for Middle Tennessee State Normal School building recently noted; cost about \$200,000; will let contract about February 1.

Tenn., Pulaski.—Board of Governor of Massey School proposes erection of dormitory.

Tex., Amarillo.—Southwest Union Conference of Seventh Day Adventists awarded contract to C. B. Strawn & Sons for erection of school building recently noted; two stories; 30x50 feet; cement blocks; hot-air heat; cost \$5000; plans by A. E. Strawn, A. W. Jensen may be addressed. (See "Machinery Wanted.")

Tex., Bovina.—City voted \$12,000 of bonds to erect school. Address The Mayor.

Tex., Farwell.—City voted \$20,000 of bonds for school improvements. Address The Mayor.

Tex., Fort Worth.—Committee has formally adopted plans for erection of Southwestern Baptist Theological Seminary; three stories; 23x176 feet; reinforced concrete; fireproof; pressed-brick facing; auditorium to seat 1000 people and dormitory with accommodations for 200 students; L. R. Scarborough, H. B. Carroll and others, committee. (Mentioned in October.)

Tex., Fort Worth.—City contemplates voting on additional \$100,000 bond issue for school improvements. Address The Mayor.

Tex., Laredo.—City accepted plans by Sutherland & Co., Laredo, for school; two stories and basement; brick; 21 rooms; cost \$20,000. (Mentioned in October.)

Tex., Pendleton.—Pendleton Common School District proposes issuing \$7000 of bonds to erect school; W. S. Ship, County Judge, Belton, Tex.

Tex., Rochelle.—Rochelle Common School District voted \$10,000 of bonds to erect stone or brick school. Address District Commissioners.

Va., Richmond.—Pegram Seminary awarded contract to C. M. Eddington, Richmond, for erection of school.

THEATERS

Ga., Dublin.—Charles W. Brantley proposes to erect opera-house.

D. C., Washington.—Dixie Amusement Co. awarded contract to C. Z. Hazell & Co., Walker Bldg., Washington, for erection of moving-picture theater recently noted; 40x35 feet; seating capacity 432; fireproof construction; steam heat; electric lighting; cost \$10,000; plans by Clarke Jones. (See "Machinery Wanted.")

Mo., St. Louis.—Hagerman-Fitzsimmons Realty Co. purchased site 115x146 feet on which to erect theater.

Tenn., Nashville.—International Amusement Co., Karl Hoblitzelle, Chicago, Ill., president, will have plans prepared by Mauran & Russell, St. Louis, Mo., for theater recently mentioned; seating capacity 2000; cost \$150,000.

W. Va., Charleston.—Kanawha Theater Co. incorporated with \$5000 capital stock by T. L. Kerse, E. C. Harrison, Edmund Price and others.

WAREHOUSES

Ky., Louisville.—Belknap Hardware & Manufacturing Co. leased site with frontage of 25 feet on which it is proposed to erect warehouse.

Md., Baltimore.—J. Frederick Schnapfe awarded contract to Maryland Construction Co., Maryland Telephone Bldg., Baltimore, to erect warehouse on McKim St.; 13x32 feet; two stories; cost \$2500; plans by Henry J. Tinley, 314 North Charles St., Baltimore.

Mo., Kansas City.—American Sash & Door Co. will open bids about December 20 for erection of warehouse recently reported burned; 110x40 feet; four stories; probably concrete construction; will install freight elevator; plans are being prepared by Howe & Holt, Kansas City.

Mo., St. Louis.—Ludlow-Saylor Wire Co. will erect warehouse on site recently noted purchased; mill construction building; 100x350 feet; cost \$20,000; plans by Ernest C. Klipstein, St. Louis; contractor, E. Ward, St. Louis.

Okla., Oklahoma City.—The Crane Company of Chicago, Ill., purchased site for \$26,750 on which to erect warehouse; five or six stories; reinforced concrete; 125x130 feet; first floor to be used as city sales office and second as general offices and display rooms; electric elevators.

S. C., Greenville.—Greenville Warehouse Co. incorporated with \$20,000 capital stock by E. G. Mallard, E. G. Mallard, Jr., and S. L. Mallard.

Tenn., Nashville.—Hughes Warehouse & Elevator Co. buildings (contract recently noted awarded to Schuyler & Schuyler, Nashville) will include warehouse 100x100 feet; mill building 40x50 feet; 12 bins 10x12x40 feet each; ordinary construction; cost \$50,000; daily output, 100 tons of various feeds; plans by Baxter & Co., Buffalo, N. Y.

Tex., Houston.—Jerome Cochran Company, engineer, Houston, preparing plans for warehouse; reinforced concrete and steel; 10 stories and two basements; 15 acres of floor space; support load of 400 pounds to square foot on first floor; five platform scales for weighing incoming and outgoing goods; two basements to have cold-storage facilities; seven elevators for hoisting goods; also four electrically driven "barrel" elevators for hoisting barrels and four spiral chutes for unbreakable material, such as sacks, etc.; cost \$750,000.

Tex., Houston.—Southern Pacific Company, W. G. Van Vleck, manager of Texas lines, Houston, Tex.; Houston & Texas Central Railroad, G. Radetzki, general superintendent, Houston, Tex., and other railroads will erect warehouse.

W. Va., Clarksburg.—Clarksburg Transfer & Storage Co., 107 West Pike St. (recently reported incorporated under Charleston, W. Va., with \$10,000 capital stock) elected D. S. Lawman, president; C. P. Rush, secretary and treasurer; will erect transfer and storage building; 50x48 feet; ordinary construction; architect not yet selected.

RAILROAD CONSTRUCTION

RAILWAYS

Ala., Birmingham.—The Birmingham & Gulf Railroad Co. is reported chartered to conduct a street railway, as well as a general electric railway system. Headquarters at Birmingham. Capital \$3000. Incorporators are J. M. Dewberry, acting president and first vice-president; R. D. Johnston, Jr., secretary; Louis Minor, treasurer.

Ala., Mobile.—An official confirms the report that the New Orleans, Mobile & Chicago Railroad Co. has taken over the Mobile, Jackson & Kansas City Railroad, but says no construction nor extension is contemplated

at present. W. F. Owen is general manager at Mobile, Ala.

Ala., Mobile.—The New Orleans, Mobile & Chicago Railroad Co. has authorized \$35,000,000 of bonds, part of which will be used for development. The directors are Joseph C. Rich, William F. Owen, George W. Crary, Homer M. Hood, Henry F. Ricker, William L. O'Dwyer, James J. McEwen, Jr., Frederick S. Sprague, Mobile; John A. Latig, Morton G. Bogue, Willard C. Hunston, New York.

Ala., Russellville.—About two miles of grading are reported complete on the branch railroad from Rockwood along Hamilton Creek to the property of the Russellville Iron, Ore & Metal Co. Tracklaying will soon begin on the road, which will be about three miles long.

Ark., Harrison.—The Southwest Construction Co. of Keener, Ark., is reported to have the contract for the Harrison & Mineral Belt Railway Co., whose line is now under construction from Keener to Dodd City, Ark., 16 miles. T. A. Morton of Keener, Ark., is chief engineer.

Ark., McCreanor.—The Meto Valley Railway is making survey for an extension of 35 miles to Pine Bluff, Ark. F. C. Kye is chief engineer at Carlisle, Ark.

Ark., Nashville.—The Memphis, Paris & Gulf Railroad Co., it is announced, has decided to build its southwestern extension from Ashdown, Ark., to Dallas, Tex., via Clarksville, Sulphur Springs and Terrell. The contemplated eastern extension is from Murfreesboro, Ark., via Arkadelphia, Pine Bluff, DeWitt and Marianna to Memphis, Tenn. C. C. Henderson is vice-president and general manager, and H. C. McCluer is chief engineer at Nashville, Ark.

Ark., Ola.—J. O. Jones, County Surveyor of Yell county, Arkansas, denies the press report that he is surveying for a line contemplated by the Kansas City Southern Railroad Co.

Ark., Reader.—With reference to a recent press report that the Prescott, Reader & Fordyce Railway Co. would build an extension from Lydia to Prescott, official information says that no construction is being done on account of financial circumstances.

Fla., Live Oak.—The Florida Railway has filed a mortgage to secure \$4,000,000 of bonds to build an extension from Live Oak to Fernandina, Fla., and thence north and west. Frank Drew is president at Live Oak, Fla.

Fla., Springhill.—The Gulf Lumber & Railroad Co. has been incorporated, and among other things is authorized to build railroads; capital \$60,000. The incorporators are C. H. Boyd of Hinson, Fla.; J. A. McLaurin of Tallahassee, Fla., and Y. L. Watson of Quincy, Fla.

Ga., Atlanta.—The Fairburn & Atlanta Railroad Co., which is building 10½ miles of line from College Park to Fairburn, Ga., has completed about seven miles of grade.

Ga., Augusta.—The Augusta & Aiken Railway, it is reported, contemplates building a freight terminal in Augusta. C. C. Tegethoff is president and James U. Jackson vice-president at Augusta, Ga.

Ga., Eatonton.—A mass-meeting is reported for building a railroad from Eatonton to Madison, Ga., 20 miles. The Mayor may be able to give information.

Ga., Savannah.—The Atlantic Coast Line will, it is reported, raise its tracks in Savannah and build a new subway at Henry St., which latter will cost between \$30,000 and \$40,000, the expense of the subway to be shared with the city. E. B. Pleasants is chief engineer at Wilmington, N. C.

Ga., Statesboro.—Chas. C. Dickinson of New York, representing the Carnegie Trust Co., will inspect the Savannah, Augusta & Northern Railway, now in a receivership, and it is reported the line will be extended. E. M. Rice is chief engineer at Statesboro, Ga.

Ky., Jackson.—Survey is reported under way for an eastward extension of the Lexington & Eastern Railroad via Hindman into the Elkhorn coal fields, about 80 miles. W. H. Courtenay, chief engineer of the Louisville & Nashville Railroad, Louisville, Ky., can probably give information.

Ky., Versailles.—The Louisville & Nashville Railroad Co., according to a dispatch, will make a change of line at Versailles to improve connection with the Kentucky Highlands Railroad. W. H. Courtenay is chief engineer at Louisville, Ky.

Ky., Washtoto.—The Washtoto & Black Mountain Railroad Co. has amended its articles of incorporation to increase the capital from \$50,000 to \$1,000,000 and to provide for an extension from the mouth of Toms Creek up the Cumberland River to a point near Harlan, Ky., and thence up Clover Fork to Mor-

ris Gap, about 50 miles. Also for a branch from a point near Harlan up Poor Fork, 70 miles. Surveys are reported under way for these extensions, which will open up rich coal lands. T. J. Asher & Sons of Washtoto control the railroad and are reported to have already let contract for seven miles of line up Yellow Creek to the Callison Construction Co. and the Gibson-Carr Construction Co. of Middlesboro, Ky.

La., Arnaudville.—The Le Teche Sugar Co., Ltd., was recently organized and proposes to build 10 or 15 miles of railway. Dr. A. C. Durio is president, Daniel P. Martin vice-president, J. M. Olivier secretary and George L. Roger treasurer.

La., Hodge.—The North Louisiana & Gulf Railroad Co., which purchased the Bienville & Quitman Railroad, three miles long, this year, has graded six miles of line from Walsh toward Danville, La., 10 miles, and contract is let for the remaining four miles.

La., New Iberia.—An official of the New Iberia, St. Martins & Northern Railway Co. is reported as saying that work is under way on the line between New Iberia and Port Barre, La., 48 miles. P. M. Johnston, Son & Allhands of St. Elmo, Ill., are the contractors, and subcontract is let to the Jewett Construction Co. of Springfield, Mo., for bridges and buildings, but one steel draw 140 feet long will be put in by the Wisconsin Bridge and Iron Works of Milwaukee, Wis. The line crosses the Bayou Teche about seven miles from New Iberia.

La., Wyatt.—The Wyatt Lumber Co. says that it contemplates building about 14 miles of railroad to timber land in Sabine parish. A. H. Henderson, treasurer and general manager of the company, will have charge of construction. Connection will be made with the Kansas City Southern Railway.

Md., Frederick.—The Frederick Railroad Co. is the name of the new corporation representing the consolidation of the Frederick & Middletown Railway, the Washington, Frederick & Gettysburg Railway and the Jefferson & Braddock Heights Railway. It is expected that an extension from Jefferson to Brunswick, Md., seven miles, will be made soon; another extension from Thurmont to Emmitsburg, about seven miles, is contemplated. The officers are Emory L. Coblenz, president; Dr. Franklin B. Smith, vice-president; Thomas H. Haller, treasurer; Charles C. Waters, secretary.

Mo., Kansas City.—The Intercity Viaduct Freight Railways Co. has been incorporated to conduct business over the viaduct of the Kansas City Viaduct & Terminal Railway Co. J. W. Reinhart is president. A survey is being made to make connections with railroads.

Mo., St. Louis.—The Manufacturers' Railway Co., it is reported, announces that it contemplates building a line to the southwest and connecting with other roads, such as the Midland Valley, the Missouri, Oklahoma & Gulf and the Fort Smith & Western, to make a through route. The company proposes to extend its line at St. Louis, and possibly build to Springfield, Mo. George F. Moore is president and general manager at St. Louis.

Miss., Gulfport.—The Gulfport & Mississippi Coast Traction Co. is reported to have let contract for grading and tracklaying on the extension to Pass Christian to W. A. Hughston, who has begun work. Construction has not yet begun on the loop in the western part of Gulfport.

Miss., Columbus.—The Columbus, Mississippi & West Alabama Railroad Co., capital \$1,000,000, which proposes to build a line from Winfield, Ala., via Columbus, Miss., to Aliceville, Ala., or some other point on the Alabama, Tennessee & Northern Railroad, has organized by electing directors thus: C. F. Sherrod, president, and J. M. Brown, vice-president, Columbus, Miss.; R. W. Watson, secretary, Harrisburg, Pa.; A. K. Silverthorne, treasurer, Buffalo, N. Y.; A. E. Silverthorne, general manager, St. Louis, Mo., and Dr. J. A. Root, Erie, Pa.

Mo., Jefferson City.—The North Missouri Central Railway Co. has let contract to the M. A. Talbott Company, American Bldg., Baltimore, Md., to build its proposed line from Jefferson City via Columbia to Mexico, Mo., 60 miles. Work is to begin, say the contractors, as soon as weather will permit, and meanwhile material and supplies will be assembled. The headquarters of the railroad are at the National Bank of Commerce Bldg., St. Louis, Mo., where O. F. Spaete may be addressed. A. J. Estes of Columbus, Mo., is secretary and treasurer.

Mo., Joplin.—An officer of the St. Louis, Bartlesville & Pacific Railway is reported as saying that location survey has been made from Joplin, Mo., to Carmen, Okla., 225 miles. D. H. Rhodes is chief engineer at 213 4th St., Joplin, Mo.

Mo., Mexico.—C. W. Galtier, secretary of the Mexico, Santa Fe & Perry Traction Co., is quoted as saying that the company expects to award contracts soon for about 100 miles of line, including 8 or 10 bridges, from Mexico southward to Columbia and Fulton, Mo., and northward to Santa Fe, Perry and Hannibal, Mo. Burns & Co., Isabella Bldg., Chicago, Ill., will purchase material. Three power plants are to be erected.

Mo., St. Louis.—The St. Louis, Lakewood & Grant Park Railway Co. contemplates building a line to the Meramec River, six miles. E. D. Hughes is general manager.

N. C., Winston-Salem.—The Yadkin River Railway Co. has been granted a franchise in East Bend, Yadkin county, for its proposed line from East Bend to Donahua, five miles. It is expected later to extend from Donahua to Winston-Salem, and still later from East Bend via Booneville to Yadkinville and back to Winston-Salem, making a loop. Work must begin under the franchise within two years and be completed within five years. The incorporators are W. A. Martin, George Steelman and J. W. Marler, all of East Bend, N. C.

Okla., Chickasha.—An officer confirms the report that the Chickasha Terminal Railway Co. has been chartered to build a terminal at Chickasha for the Oklahoma Central Railway. Dorset Carter is president, C. E. Nelson secretary, H. H. Fitzgerald chief engineer, all of Purcell, Okla.

Okla., Gage.—The Beaver Valley & Northwestern Railway Co., according to a press report quoting an official, expects to begin construction early next year from Gage to Hooker, Okla., 106 miles, for which survey is under way. C. A. Holmes of Gage, Okla., is secretary.

Okla., Durant.—The Missouri, Oklahoma & Gulf Railroad Co. is reported to have let contract for its steel bridge over the Red River at Carpenters Bluff to the Wisconsin Bridge & Iron Co., of Milwaukee. It will be a heavy structure 1100 feet long.

Okla., Muskogee.—The Muskogee, Hartshorne & Southern Railroad Co. proposes to build a line 190 miles long from Muskogee, Okla., to Paris, Tex., via Wilburton and Stanley. The Freebar Engineering & Construction Co. of Kansas City, Mo., is engineer in charge. The route will probably be changed so as not to pass through Hartshorne. H. R. Blauvelt is president and J. E. Armstrong, secretary, both of Oklahoma City, Okla. A. D. Daley is treasurer at Edmond, Okla.

Okla., Oklahoma City.—The Fort Smith & Western Railway Co., according to reports quoting A. C. Dustin of Cleveland, Ohio, who is president of the line, contemplates building extensions northwest and southwest from Oklahoma City, and perhaps erecting a large station at the latter point; also it is contemplated to build southwest from El Reno to connect with the Kansas City, Mexico & Orient Railway and to extend eastward from Fort Smith toward St. Louis. W. M. Bushnell is general manager at Fort Smith, Ark.

Okla., Webber Falls.—The Webber Falls, Shawnee & Western Railroad Co., capital \$100,000 has been chartered to build a line from Webber Falls to Shawnee, Okla., 106 miles, via Warner and Checotah and either Weleetka or Dustin. The incorporators are A. R. Peyinghaus of Muskogee, Okla.; J. F. Sparrow and J. B. Crouch of Porum, Okla.; O. L. Hayes of Webber Falls and Campbell Russell of Warner, Okla. Mr. Peyinghaus is general manager and Mr. Crouch secretary and general attorney.

S. C., Anderson.—W. J. Thackston, manager of the Anderson Traction Co., is reported as saying that the line will be extended to Greenville, but actual construction will hardly begin before next spring, although surveys will be made this winter.

Tenn., Columbia.—The Middle Tennessee Railroad Co., which has built from Franklin to Leatherwood, Tenn., 28 miles, this year, proposes to build from Mt. Pleasant to Water Valley, Tenn., 18 miles. Address R. G. Sparrow, care Middle Tennessee Railroad Co., Columbia, Tenn.

Tenn., Franklin.—The Middle Tennessee Railroad, it is reported, has operated its first train to the Elam Farm at Lopers Creek, 23 miles from Franklin. It is proposed to extend 20 miles farther to Mount Pleasant, Tenn.

Tenn., Gainesboro.—Jackson county is reported to have voted a subscription of \$150,000 to the stock of the proposed Tennessee, Alabama & Kentucky Railroad.

Tenn., Memphis.—The Lakeview Traction Co. of Memphis will receive bids for laying 12 miles of track and for building 1025 linear feet of pile trestle until January 5, 1910. W. W. Hayden of Memphis, Tenn., is chief engineer.

Tenn., Memphis.—W. C. Nixon, vice-president and general manager of the Frisco system, is reported as saying that work will soon begin on the large freight terminal yard contemplated east of Memphis. M. C. Byers is chief engineer at St. Louis, Mo.

Tenn., Nashville.—The Tennessee Central Railroad Co. is reported considering plans to build extensions eastward from Harriman, Tenn., and westward from Hopkinsville, Ky. L. F. Lonnbladh is chief engineer at Nashville, Tenn.

Tenn., Nashville.—The Nashville & Adairville Railway Co., capital \$25,000, has applied for a charter to build a line northeast from Nashville via Goodlettsville to Whitehouse and thence northwest to Adairville, Ky., about 40 miles. The incorporators are W. A. Buntin, B. P. Gilbert, H. M. Hayes, S. C. Robb and R. A. Wilson.

Tenn., Waynesboro.—A dispatch says that Wayne county has voted bonds for a \$100,000 subscription to the stock of the St. Louis & Birmingham Railroad.

Tex., Abilene.—Surveys have been made for the Abilene & Southern Railway, according to a report quoting an officer, from Abilene, Tex., southeast to Rising Star, 55 miles.

Tex., Belton.—A movement is reported under way to build a railroad between Belton and Trinity, Tex., 130 miles. C. F. Denny of Belton, Tex., is in communication with the Chicago Construction Co. of Chicago, Ill., relative to building the line.

Tex., Brownwood.—The Brownwood North & South Railroad Co. has engaged John Meade of Fort Worth to make a survey for the proposed line from Brownwood toward Rising Star, 39 miles. M. E. Ragsdale of Brownwood is assistant engineer.

Tex., Clarksville.—The Oklahoma, Red River & Texas Railway Co., which has applied for a charter, proposes to build 80 miles of line from Blossom to Mincola, Tex., via Depot and Quitman. Two large bridges will be required, one over the Sulphur River and another over the Sabine River. John T. Upchurch of Clarksville, Tex., is engineer in charge. From Blossom to Depot, 12 miles, line is built and in operation. The other officers are C. P. Moore, president; Frank Miesch, vice-president; J. L. Skinner, secretary; J. T. Brown, treasurer. All the foregoing are also directors, besides E. L. Canterbury and John Miesch. R. H. Bruce is general manager. All are residents of Clarksville, Tex.

Tex., Henrietta.—The Henrietta & Southwestern Railway, it is reported, will complete its extension from Scotland to Archer City in a few weeks, and a further extension is contemplated. Judge A. H. Carrigan and the Henrietta Board of Trade are reported interested.

Tex., Jefferson.—The Jefferson & Northwestern Railroad Co., it is reported, contemplates building an extension of 20 miles to Naples or Clarksville, Tex. M. R. Clark is general manager.

Tex., Lometa.—The Gulf, Colorado & Santa Fe Railway is reported to have amended its charter for an extension from Lometa, on the San Angelo branch, via San Saba and Brady to a point in Concho county, 103 miles. C. F. W. Felt is chief engineer at Galveston, Tex.

Tex., Laredo.—Perry Clark of Harlingen, Tex., is reported to have contract for grading a new railroad from Laredo down the river to Sam Fordyce. C. M. Fish, general freight and passenger agent of the Texas-Mexican Railway at Laredo, Tex., and J. C. Reister of the San Antonio & Aransas Pass Railway, San Antonio, Tex., are said to be the promoters.

Tex., Mt. Pleasant.—Grading contract for the Paris & Mount Pleasant Railroad is reported let to M. Tansey of Shreveport, La. R. F. Scott is president, N. H. Ragland secretary, and H. P. Moberly chief engineer. Line will be about 50 miles long.

Tex., Uvalde.—An official writes that the Uvalde & Leona Valley Interurban Railway contemplates building from Uvalde to Batesville, Tex., 25 miles, including two wooden bridges. The country is level. Charles Peterson is president, A. M. Avant vice-president, both of San Antonio, Tex.; M. M. McFarland vice-president and general manager, F. J. Rhine secretary and treasurer, and W. D. Love general attorney, all at Uvalde, Tex.

Va., Fredericksburg.—William C. Whitner, president of the Fredericksburg Power Co., is quoted as saying that survey will soon begin to extend the Richmond & Chesapeake Bay Railroad from Ashland, Va., to Fredericksburg and thence to Washington, D. C.

Va., Narrows.—The New River, Holston & Western Railway, according to a press re-

port, will probably complete its eight-mile extension to Rocky Gap by Christmas.

Va., Norfolk.—The Norfolk & Southern Railway was bought in at the receiver's sale December 7 by the reorganization committee, which includes Marsden J. Perry of Providence, R. I.; Oakleigh Thorne and C. L. Chadbourne of New York, and it is expected that bonds will be issued for continuing improvements. E. T. Lamb is general manager.

W. Va., Charleston.—A railroad which will develop coal properties is reported contemplated by the Horse Creek Coal & Land Co., the D. G. Courtney Company and Horse Creek Land & Mining Co. The Chesapeake & Ohio Railway, of which H. Pierce is engineer of construction at Richmond, Va., is said to be interested and will build a branch from Alaman, on the Coal River division, which will be continued by the other corporations named to a point near Grinthsville, W. Va. Among those interested are C. C. Watts, John Ruby, Charles Alderson, Sterrett Bros., Guy Porter, Fred Gardner, Lucian E. Potteet, Julian Hill and Crawford & Ashby, all of Charleston, W. Va.

STREET RAILWAYS

Fla., Pensacola.—The Dallas Land Co. has applied for a franchise to build a street railway extension through the North Hill Highlands and to the race track.

Gal., Dublin.—The Dublin Street Railway Co. has been granted a franchise to certain conditions, which, if agreed upon, will probably result in the construction of a street railway. The Mayor may be able to give information.

Gal., Macon.—The Macon Railway & Light Co. contemplates building several extensions, one to Cross Keys, another to Newburg and another to Bailey's Mill. W. Jordan Massee is president.

La., Alexandria.—The Alexandria Electric Street Railway Co. has applied for a franchise to build an extension on De Soto street from Second to 10th street; thence to Jackson son street, and along Jackson street to the city limits.

Miss., Meridian.—E. Cahn, one of those interested, writes that steps have been taken to form a company to build an electric railway and a general power plant, as previously reported.

N. C., Asheville.—A letter says that the Asheville Electric Co. will extend its French Broad Ave. line from Depot St. over the West Asheville bridge (for which latter contract has been let) to the Sulphur Springs property, five miles.

Okl., Enid.—The City Council has granted a street-railway franchise to C. H. Bosler and J. J. Hall.

Okl., Enid.—The Enid City Railroad Co., it is reported, contemplates building an extension to the northeastern part of town.

Okl., Oklahoma City.—The Citizens' Traction Co., it is understood, will soon build an extension to Packerdown, besides doing other work. L. E. Paterson is president and Alfred Hare general manager.

Va., Richmond.—The Virginia Railway & Power Co. is contemplating the construction of a viaduct from Church Hill and extending as trackage. William Northrop is president.

MACHINERY, PROPOSALS AND SUPPLIES WANTED

Manufacturers and others in need of machinery or supplies of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery or supplies needed we will make their wants known free of cost, and in this way secure the attention of manufacturers and dealers throughout the country. The Manufacturers' Record has received during the week the following particulars as to machinery and supplies wanted.

Addressing Machine, etc.—W. T. Phipps & Co., Owensboro, Ky., wants second-hand Elliott addressing machine and Elliott stencil cutter; also second-hand multigraph or writer press.

Air Compressor.—O. R. Whitney, 39-41 Cortlandt St., New York, wants air compressor to deliver 2000 feet free air per minute.

Baling Presses.—John W. Joachim, 601 Louisiana Ave., New Orleans, La., wants catalogues and prices on baling presses.

Bank Fixtures.—L. L. Little, Ansonville, N. C., wants prices on bank fixtures.

Boilers.—See "Pumping Plant."

Bank Fixtures.—W. L. Stevens Company, 1109 Hennen Bldg., New Orleans, La., wants prices on bank fixtures.

Bearings.—See "Graphite Bearings."

Bedsprings Machinery, etc.—See "Iron-working Machinery."

Boiler and Engine.—I. M. De Pew, Palma Sola, Fla., wants 10-horse-power boiler and engine; steam or gasoline.

Boilers.—Union Gas & Electric Co., C. S. Stephenson, secretary, 209 South Broadway, Oklahoma City, Okla., wants prices and catalogues on boilers.

Bottling Machinery.—T. H. Martin, Empire Bldg., Atlanta, Ga., wants (for client) carbonating and bottling equipment suitable for cider; capacity, 200 to 300 gallons daily.

Brassworking Machinery, etc.—See "Iron-working Machinery."

Bridge Construction.—Dallas County Commissioners' Court, Dallas, Tex., will open bids January 15 (instead of January 5, as lately stated) for furnishing and constructing steel highway bridge and viaduct over Trinity river; J. F. Witt, County Engineer; George L. Fearn, County Auditor. (Further facts lately noted.)

Canning Machinery.—M. J. Hogan, Galveston, Tex., wants machinery for canning oysters, crabs, etc.

Cars.—Baldwin County Brick & Pottery Co., Milledgeville, Ga., wants prices on second-hand drier cars and rails for same.

Cars.—O. R. Whitney, 39-41 Cortlandt St., New York, wants 40 3/4" gauge V-shaped steel dump cars; second-hand. (Ernst Weiner or Koppel preferred.)

Church Furniture.—See "Furniture."

Church Furniture.—Ernest V. Richards, Bennettsville, S. C., wants prices on church furniture for \$6000 building.

Concrete Construction.—W. L. Stevens Company, 1109 Hennen Bldg., New Orleans, La., wants to correspond with reinforced concrete construction companies.

Concrete-block Machinery.—C. E. Wood, Gatun, Canal Zone, Panama, wants catalogues, illustrations, etc., of hand and power concrete-block machinery; state shipping weights for each style.

Cotton Gin.—Western Cotton Oil & Gin Co., Haskell, Tex., wants complete eight-stand gin outfit.

Crane.—Bids will be received at office of E. Winstanley, purchasing agent, Kansas City, Mo., until December 23 for 15-ton electric traveling crane and 15-ton automatic air lift, to be installed at Turkey Creek pumping station of Kansas City water-works; certified check for 5 per cent. of total bid; specifications furnished on application to Mr. Winstanley.

Crane.—Florida Machine Works, Jacksonville, Fla., wants electric traveling crane; 5 to 10 tons capacity; about 27 feet span and 20 feet lift.

Electric Conduits and Wiring.—See "Government and State Buildings" under N. C., Henderson.

Electric Conduits and Wiring.—See "Government and State Buildings" under Va., Fort Monroe.

Electrical Equipment.—Montezuma Bobbin Co., Montezuma, N. C., wants prices on electrical equipment.

Electrical Equipment, etc.—Board of Education, Memphis, Tenn., will receive bids December 27 for following work to be installed in high-school building now under construction: Heating and ventilating, automatic temperature regulation, power-plant motors and switchboard, electric wiring and conduits. Bidders may receive plans and specifications from B. C. Alsop & Co., architects, Memphis, or J. H. Brady, designing engineer, Kansas City, Mo.; bidders required to deposit with architect or engineer certified check for \$25; proposals to be made on forms furnished by designing engineer.

Electrical Machinery.—Pennsylvania Equipment Co., 1209 West End Trust Bldg., Broad St. and South Penn Sq., Philadelphia, Pa., wants 300-kilowatt generator, alternating current; also 200-kilowatt generator, three-phase, 60-cycle, with engine of about same size.

Electrical Machinery.—Union Gas & Electric Co., C. S. Stephenson, secretary, 209 South Broadway, Oklahoma City, Okla., wants prices and catalogues on motors and generators.

Electric Wiring.—Edwards & Blythe, Hendersonville, N. C., want estimates on electric wiring.

Engine.—Pennsylvania Equipment Co.,

Broad St. and South Penn Sq., Philadelphia, Pa., wants engine for 200-kilowatt generator, 60-cycle.

Engine.—Western Cotton Oil & Gin Co., Haskell, Tex., wants Corliss engine, 16x12.

Engine.—See "Pumping Plant."

Excelsior Machinery.—John W. Joachim, 601 Louisiana Ave., New Orleans, La., wants catalogues and prices on excelsior machinery and baling presses.

Fire-department Apparatus.—City of Shelbyville, Ky., T. E. Bland, Mayor, wants motor hose wagon.

Furniture.—Ernest V. Richards, Bennettsville, S. C., wants prices on furniture for \$15,000 hotel, Cheraw, S. C.; also on furniture for \$6000 church.

Furniture Machinery.—J. Frank Pate, Brickton, N. C., wants mission-furniture machinery.

Gasoline Engine.—See "Boiler and Engine."

Gasoline Engine.—J. C. Steele & Sons, Statesville, N. C., want second-hand 8 to 10-horse-power stationary gasoline engine.

Glass.—Ernest V. Richards, Bennettsville, S. C., wants prices on stained glass for \$6000 church.

Graphite Bearings.—Cardwell Machine Co., Richmond, Va., wants addresses of manufacturers of graphite bearings.

Grading.—City Clerk, Durham, N. C., will receive bids until December 20 for grading three streets; excavation, 20,000 cubic yards; information furnished on application at office of City Engineer, Municipal Bldg.

Hardware.—G. Z. Garabedian, 1005 South Wright St., Champaign, Ill., invites catalogues and other data from manufacturers and exporters of hardware who want to establish trade in Turkey.

Heating Apparatus.—See "Government and State Buildings" under Va., Fort Monroe.

Heating Apparatus.—See "Government and State Buildings" under N. C., Henderson.

Heating Plant.—Sanders Overall Factory, Dalton, Ga., wants prices on heating plant for two floors, 30x110 feet; delivered Rome, Ga.; company furnishes pipe.

Heating Plant.—Ernest V. Richards, Bennettsville, S. C., wants prices on heating plant for \$6000 church.

Heating Plant.—See "Electrical Equipment, etc."

Heating Plant.—Eely & Weller, Memphis, Tenn., want prices on steam-heating plant for 40-room hotel at Blytheville, Ark.

Heating Plant.—Edwards & Blythe, Hendersonville, N. C., want estimates on heating plant for \$25,000 bank and office building.

Hoisting Engine.—Baldwin County Brick & Pottery Co., Milledgeville, Ga., wants prices on second-hand reversible or double-drum hoisting engine.

Ice-cream Machinery.—Athens Ice & Cold Storage Co., Athens, Tenn., is receiving proposals on ice-cream machinery; daily capacity, 100 gallons or more.

Ice and Refrigerating Machinery.—Arctic Ice & Refrigerating Co., Enid, Okla., will soon open bids on ice and refrigeration machinery for plant of 200 tons refrigerating capacity. Address Chas. Phillips, Wichita, Kans.

Iron Statuary.—John Bouchard & Sons Co., Nashville, Tenn., wants pair of cast-iron recumbent or crouching lions; new or second-hand.

Ironworking Machinery, etc.—Crescent Bed Co., 705 People's Bank Bldg., New Orleans, La., wants machinery for manufacturing iron and brass beds, springs, etc.

Knife Grinder.—Sea Island Cotton Gin Co., Vidalia, Ga., wants knife grinder with 30 to 35-inch stroke.

Leather and Skins.—G. Z. Garabedian, 1005 South Wright St., Champaign, Ill., wants catalogues and other data from leather and skin manufacturers who want to establish trade in Turkey.

Levee Construction.—Mississippi River Commission, first and second districts, United States Engineer Office, Custom-house, Memphis, Tenn. Proposals for levee work in Lower St. Francis Levee District will be received until December 22; information on application; M. L. Walker, Major, Engineers.

Lighting Fixtures, etc.—Union Gas & Electric Co., C. S. Stephenson, secretary, 209 South Broadway, Oklahoma City, Okla., wants prices and catalogues on lighting fixtures, supplies, etc.

Locomotive.—Vaughan Coal & Coke Co., L. H. Vaughan, president, Roanoke, Va., wants mine locomotive for Roderfeld (W. Va.) mines; four-foot gauge; weight 6 to 10 tons; height not exceeding 4 feet 6 inches from top of rail.

Locomotive.—H. W. Dexter, Box 546, Macon, Ga., wants (for client) 40 to 50-ton Shay geared locomotive; give age, type, price and serial factory number.

Locomotive.—O. R. Whitney, 39-41 Cortlandt St., New York, wants 7x12 saddle-tank 36" gauge locomotive.

Machine Tools.—W. R. Blake, Sidney, O., will buy second-hand 60-inch swing lathe or vertical boring mill.

Metal Work.—W. L. Stevens Co., 1109 Hennen Bldg., New Orleans, La., wants prices on ornamental metal work for \$35,000 bank building.

Mining Machinery.—Colonial Coal & Coke Co., Prestonsburg, Ky., is receiving bids on mining machinery and equipment, including electric machinery, Shaker screen tipples, etc.

Necktie Machinery and Materials.—Southern Development Co., Box 26, Houston, Tex., wants information and prices on material and machinery to manufacture neckties.

Oil Machinery.—S. M. Pamillis, 10 Diamond Square, Pittsburg, Pa., wants olive-oil machines.

Oils.—G. Z. Garabedian, 1005 South Wright St., Champaign, Ill., wants catalogues and other data from manufacturers and exporters of margarin and other oils who want to establish trade in Turkey.

Orchard Supplies.—High Knob Orchard Co., Purgitsville, W. Va., wants orchard supplies.

Paint Machinery.—Jos. W. Patrick, president Wadesboro Paint Manufacturing Co., Wadesboro, N. C., wants paint machinery, including mixing and grinding machines.

Paving.—Bob Parman, City Clerk, Oklahoma City, Okla., will open bids December 29 for grading, paving, curbing, etc., all alleys in Block 62, Original Plat, and in east 200 feet of Block 3, Main-street Addition; vitrified-brick paving; five-inch Portland cement concrete foundation; oak curbing; plans and specifications on file in office of City Clerk; certified check, 3 per cent. of bid.

Paving.—Board of Public Works, Mobile, Ala., through its secretary, will receive bids until January 6 for construction of 3760 square yards of cement street paving, including grading and four inches of concrete foundation; specifications can be had on application to Chief Engineer; Wright Smith, Chief Engineer.

Paving.—F. T. Patterson, City Clerk, Newbern, N. C., will open bids January 4 for paving 48,000 square yards of street with brick, cement filler; with brick, sand filler; bitulithic and asphalt macadam; all or part to be made in either kind of pavement; plans and specifications furnished on application; certified check, \$250.

Paving.—Bob Parman, City Clerk, Oklahoma City, Okla., will open bids December 29 for construction of sidewalk aprons; detailed lists and specifications on file with City Clerk and Sidewalk Inspector; certified check, 2 per cent. of bid.

Piping, etc.—Geo. C. Thompson, Spartanburg, S. C., secretary Anderson Gas Co., wants prices on 10 miles four-inch, 4 miles six-inch and 6 miles two-inch wrought-iron screw pipe, with fittings, valves and meter connections complete; f. o. b. Anderson, S. C.

Piping.—G. Z. Garabedian, 1005 South Wright St., Champaign, Ill., invites catalogues and other data from manufacturers and exporters who want to establish trade in Turkey.

Plumbing.—Eely & Weller, Memphis, Tenn., want prices on plumbing for 40-room hotel at Blytheville, Ark.

Plumbing and Gaspiping.—See "Government and State Buildings" under Va., Fort Monroe.

Plumbing and Gaspiping.—See "Government and State Buildings" under N. C., Henderson.

Plumbing Fixtures.—Ernest V. Richards, Bennettsville, S. C., wants prices on plumbing fixtures for \$45,000 hotel, Cheraw, S. C.

Pump.—Hobbs-Ives Equipment & Machinery Co., Norfolk, Va., wants second-hand steam pump for fire protection; capacity, 500 gallons per minute.

Pump.—Carolina Barytes Co., Stackhouse, N. C., wants second-hand duplex pump 4½x2½x4 inches, or 5½x3½x5 inches; standard make preferred.

Pumping Plant.—Abbott Bros., Crowley, La., want prices on pumping plant, including 325-horse-power boiler and engine, with 30 and 18-inch centrifugal pumps.

Punch and Shear.—G. C. Staltl, 517 Louisiana St., Houston, Tex., wants combination punch and shear, punching up to ½x½-inch metal.

Rails.—See "Cars."

Seating.—Ernest V. Richards, Bennettsville, S. C., wants prices on seats for \$9000 church.

Reinforcing Materials.—Mrs. Alice O. Briggance, Navasota, Tex., wants wire fabric (preferably of aluminum or non-rusting wire) as reinforcement for asbestos fireproof wall covering, etc.

Road Construction.—Duval County Commissioners, F. J. Hyde, chairman, Jacksonville, Fla., will receive bids until January 5 for resurfacing 25 miles of roads; bidders to furnish specifications for material and samples of same; thickness of resurfacing material to average not less than three inches on cross section; bids to be for fixed price per square yard for finished surface; contractor to furnish all labor and material; roads to be resurfaced were constructed of macadam, shell and gravel; certified check for \$500 to accompany each bid; further information will be furnished upon application to Gail L. Barnard, County Engineer, Courthouse, Jacksonville.

Road Improvements.—Bids will be received at County Clerk's office of Norfolk county, care of Alvah H. Martin, Clerk, Portsmouth, Va., and also by Road Engineer of Norfolk county, until December 14 for work and material required for repaving and keeping in repair for one year roads and bridges embraced in Western Branch and Tanner's Creek magisterial districts; plans and specifications posted on roads and at courthouse door; further information upon application; F. L. Portlock, Road Engineer, 240 Monticello Arcade, Norfolk, Va.

Road Machinery.—W. M. Detkins, Borderland, W. Va., wants to correspond with manufacturers of improved road-making machinery; send literature.

Roofing.—See "Rubber Roofing."

Rubber Roofing.—Cohutta Talc Co., Dalton, Ga., wants list of manufacturers of rubber roofing.

Safe, etc.—Keeney Bros., Newkirk, Okla., want prices on safe, vault and bank fixtures.

Safe, etc.—Citizens' State Bank, Cefoso, Okla., wants prices on safe and bank fixtures.

School Desks.—A. W. Jenson, Amarillo, Tex., wants prices on desks for \$5000 school.

Seating.—Plains Baptist Church, E. Timmerman, chairman, Plains, Ga., wants pews for edifice with seating capacity of 450.

Sewer Construction.—Bob Parman, City Clerk, Oklahoma City, Okla., will open bids December 29 for construction of main storm sewer on McKinley Ave., 34th St. and Classen Blvd.; also for construction of sanitary lateral sewer in Brauer Heights Addition; plans and specifications on file in office of City Clerk; certified check, 3 per cent. of bid.

Sewer Construction.—Commissioners of Sewerage, Equitable Bldg., Louisville, Ky., will receive bids until December 24 for construction of Jane St. sewer, contract No. 59, and until December 31 for construction of section "F," Gearygrass Interceptor, contract No. 60; former work will consist mainly of building combination sewer and drain 8 to 33 inches diameter, total length 3460 feet and from 4 to 17 feet deep, and including 1300 cubic yards of rock excavation, 700 cubic yards of concrete and 5700 feet of vitrified pipe from 8 to 24 inches diameter; latter of 3188 feet reinforced concrete sewer, diameters 39 and 33 inches, including 3188 feet of earth excavation, average cut 21.2 feet; 750 cubic yards of concrete, and 64,200 pounds of steel. Plans and specifications may be seen at office of commissioners and of Harrison P. Eddy, consulting engineer, 14 Beacon St., Boston, Mass.; each bid to be accompanied by certified check for at least 7 per cent. of total amount of bid or "bidder's bond" as described in proposal; P. L. Atherton, chairman; J. B. F. Breed, chief engineer of commission.

Sewer Construction.—F. C. Wyse, City Engineer, Columbia, S. C., will receive bids until December 20 for construction of 66-inch storm sewer from Hampton to Washington St., distance of 542 feet; plans on file in office of City Engineer; certified check, \$150.

Sewer Construction.—Bob Parman, City Clerk, Oklahoma City, Oklahoma, will receive bids until December 27 for construction of sanitary main sewer, consisting of lines B, D and E; plans and specifications on file with City Clerk; certified check, 3 per cent. of bid.

Sewer Construction.—Bids will be received at office of City Clerk, Anadarko, Okla., until December 21 for furnishing material and constructing combined storm and sanitary sewer system; plans and specifications on file with City Clerk, Anadarko, and with Southwestern Engineering Co., Lee Bldg., Oklahoma City, Okla.

Sewer.—O. E. Lichliter, City Clerk, Joplin, Mo., will receive bids until December 23 for

construction of 22,000 feet of West Joplin sanitary sewer, 1844 feet of "D" street and 5939 feet of Smelter Hill sanitary sewer; estimates, specifications, plans, detail drawings, etc., on file at office of City Clerk; contractors desiring to bid will be furnished proposals, etc., upon application by sending postoffice money order for \$5, payable to J. B. Hodgdon, City Engineer.

Showcase Machinery.—See "Woodworking Machinery, etc."

Soap Materials.—Luis M. Centurion, 16 Amargura St., Havana, Cuba, wants prices (f. o. b. shipping point), discounts, etc., on caustic soda, soda ash, silicate of soda, cottonseed-oils, rosin, marble dust, talc, greases, etc., for soap manufacturing.

Soap Machinery.—A. H. Watson, 118 Cool-spring St., Fayetteville, N. C., wants outfit for manufacturing toilet and laundry soaps; including kettle molds.

Stage Scenery, etc.—Dixie Amusement Co., 800 H St. N. E., Washington, D. C., wants prices on stage scenery, curtains, etc., for \$10,000 moving-picture theater.

Steam Shovel.—Baldwin County Brick & Pottery Co., Milledgeville, Ga., wants prices on second-hand steam shovel (Thew) for brickyards.

Steel, Iron, etc.—Bids will be received at office of General Purchasing Officer, Isthmian Canal Commission, Washington, D. C., until December 27 for furnishing steel, iron, copper, brass, zinc, steel cable, etc. Bids and general information relating to Circular No. 547 may be obtained at above office or office of assistant purchasing agents, 24 State St., New York; 55 National Realty Building, New Orleans; 1086 North Point St., San Francisco, Cal.; also from U. S. Engineer office in following cities: Seattle, Wash.; Los Angeles, Cal.; Baltimore, Philadelphia, Pittsburg, Boston, Buffalo, Cleveland, Cincinnati, St. Paul, Detroit, Milwaukee, Chicago, St. Louis, Chattanooga, Louisville, Mobile and Galveston; Commercial Club, Kansas City; Chamber of Commerce, Quincy, Ill., and Chamber of Commerce and Board of Trade, Tacoma, Wash.; F. C. Boggs, Captain, Corps of Engineers, U. S. A., General Purchasing Officer.

Steel.—Edwards & Blythe, Hendersonville, N. C., want estimates on reinforced steel for \$25,000 bank and office building.

Steel Springs.—A. D. Branheim, president Virginia Oil & Coal Co., Springfield, Ill., General Delivery, wants quantity of small steel springs one inch long, straight coil, diameter not definite, 12, 15 and 25 pounds strength.

Steel Plow Beams.—"X," care Manufacturers' Record, Baltimore, Md., wants addresses of manufacturers of finished steel plow beams.

Stencil Cutter.—See "Addressing Machine, etc."

Stone-cutting Machinery, etc.—Homer Bartlett, Box 94, Roanoke, Va., wants addresses of manufacturers of machinery for sawing and planing Indiana Bedford limestone for building purposes.

Sugar-mill Machinery.—Pennsylvania Equipment Co., 1209 West End Trust Bldg., Broad St. and South Penn Sq., Philadelphia, Pa., wants to correspond with manufacturers of sugar-mill machinery.

Table-slide Machinery.—Lefolr Table Plm Co., Lenoir, N. C., wants to correspond with manufacturers of table-slide machinery.

Tanks.—Western Cotton Oil & Gin Co., Haskell, Tex., wants six 10x14-foot steel tanks, without tops, for storage of cottonseed oil.

Telephones.—Ernest V. Richards, Bennettsville, S. C., wants prices on room telephones for 50-room hotel, Cheraw, S. C.

Turbines.—Union Gas & Electric Co., C. S. Stephenson, secretary, 209 South Broadway, Oklahoma City, Okla., wants prices and catalogues on turbines.

Vault Doors, etc.—W. L. Stevens Company, 1109 Hennen Bldg., New Orleans, La., wants prices on vaults and vault equipment.

Veneer-door Machinery.—T. H. Martin, Empire Bldg., Atlanta, Ga., wants (for client) complete equipment for manufacture of veneer doors; clamps for glueing and all accessories included.

Ventilating Apparatus.—See "Electrical Equipment, etc."

Wagons.—J. D. Strickland, Stilson, Ga., wants carload of wagons for farm uses.

Water-wheel.—Peacock's Iron Works, Selma, Ala., in market for turbine water-wheel; 15 to 20 horse-power with eight-foot head of water.

Water-works.—Bids for construction, delivery and erecting at Wheeling water-works pumping station of pump-house, pumping pit,

river intake line and crane runways, as shown on plans and specifications, will be received at office of Board of Control, Wheeling, W. Va., until December 21; certified check, \$3000; plans and specifications can be obtained on application to Board of Control or J. Richard Kommer, consulting engineer, 1112 House Bldg., Pittsburg, Pa., on depositing \$25 with Board of Control; C. C. Schmidt, Mayor; C. H. Brues, T. M. Haskins, Board of Control.

Water-works.—Water and Sewerage Commission, Charles W. Worth, chairman, Wilmington, N. C., will receive bids until January 12 for material and labor in connection with construction of brick power and filter house, machinery foundations, rearrangement of machinery, building of radial brick stack, extension to filter plant, building of reinforced concrete sedimentation basin and concrete storage reservoir. Specifications and plans will be ready for distribution about January 2; complete set of prints may be procured by addressing direct Southern Map Co., Southern Bldg., Wilmington, at net cost of \$5 delivered; certified check for 5 per cent. of bid. Hazlehurst & Anderson, Atlanta, Ga., and Wilmington, are consulting engineers.

Water-works Construction.—City of Broken Arrow, Okla., will open bids January 10 for construction of water-works; cost \$37,000. Address C. A. Fox.

Well Drilling.—Commissioners Water-works Improvement District No. 1, Conway, Ark., wants bids on 8-inch deep well. Address Geo. Wilson, secretary.

Well Drilling.—D. A. McPherson, Mayor, and City Council, Cuthbert, Ga., will receive bids until December 20 for drilling 10-inch artesian well; specifications may be obtained from J. B. McCrary & Co., engineers, 1301 Empire Bldg., Atlanta, Ga., or from Mr. McPherson upon application; certified check for 5 per cent. of bid.

Well Drilling.—Bids will be received by Water Commission, Jackson, Miss., until January 22 for boring artesian wells and furnishing machinery for pumping same to provide supply of not less than 4,000,000 gallons per 24 hours. General specifications can be had on application to Hamilton Johnson, general manager, Jackson Water-works.

Wire Crimper.—G. C. Staltl, 517 Louisiana St., Houston, Tex., wants wire crimper.

Wire Window Guards.—Wm. Rich, 511 Second Ave., South, Nashville, Tenn., wants about 60 to 75 wire window guards; outside measure 34½x79 feet; made of No. 10 wire, W. & M. gauge, 2-inch diamond mesh, 5/8 round frame; price by piece f. o. b. Nashville, prompt delivery.

Woodworking Machinery.—See "Veneer-door Machinery."

Woodworking Machinery.—See "Table-slide Machinery."

Woodworking Machinery.—I. M. De Per, Palma Sola, Fla., wants band saw, at least 10 inches under saw guide (any sort of table); 10-horse-power steam or gasoline boiler and engine; vertical shaft disc sander; emery stand, carrying knife or head 10 inches between flanges; polishing wheel; wood-turning lathe, not less than 16-inch swing, with carriage for knife, either hand or power feed; also pump stock and column-boring machine (unless lathe arranged for such work); all second-hand.

Woodworking Machinery, etc.—Howard Woodall, San Marcos, Tex., wants proposals on machinery for woodworking plant and showcase factory.

Woodworking Machinery.—Variety Works Co., Dawson, Ga., wants catalogues and prices on machinery for making sash, doors and blinds.

Woodworking Machinery.—Nash County Manufacturing Co., Spring Hope, N. C., wants prices on second-hand large planer and several small woodworking machines.

Woodworking Machinery.—See "Furniture Machinery."

Writer Press.—See "Addressing Machine, etc."

For a Business Education.

Baltimore has become well known for its many educational institutions, including several modern business colleges. These offer a kind of education which is demanded more and more every day. They instruct both men and women in bookkeeping (general, corporation and voucher), Pitman's shorthand writing, touch typewriting, etc. The Eaton & Burnett Business College is prominent among these institutions, and for many years it has been affording needed advantages to both day and night scholars. It is located at 9 and 11 West Baltimore St., Baltimore, Md., and invites inquiries regarding its facilities.

INDUSTRIAL NEWS OF INTEREST

Planing Mill for Sale.

Cruger & Pace, Albany, Ga., offer for sale at a low price a complete planing-mill outfit.

Cotton Mill for Sale.

Cotton manufacturers who may want to purchase an established mill are invited to address Graham & Cook of Cuero, Tex. This firm offers a plant for sale.

Important Ice Machine Contracts.

The American Machine Co. of Louisville, Ky., has received contract to furnish and install a 40-ton ice machine for the Crescent Ice and Storage Co. of Louisville. Later the Crescent company expects to add an ice machine of the same capacity.

Another Hughes Well-Drilling Contract.

Another important contract recently awarded the Hughes Specialty Well Drilling Co., 96 Ashley Ave., Charleston, S. C., provides for drilling one six-inch 500-foot well for the 50-ton ice plant of T. W. Carroll at Charleston, S. C.

Sells Two Oil Expellers.

Recent contracts awarded the Burruss Engineering Co., Atlanta, Ga., include one from Durham & McWhorter of Woodville, Ga., who have purchased two oil expellers for erection next spring. The Burruss Engineering Co. constructs the Anderson oil expeller, which is claimed to save money for its users.

Farming and Timber Lands.

An opportunity for the purchase of farming and timber lands is presented in an announcement of Arthur T. Williams, Jacksonville, Fla., who offers pine, cypress and hardwood timber, orange, vegetable and grazing lands, 325,000,000 feet of long-leaf yellow-pine timber within easy floating distance of one of the best South Atlantic seaports, etc.

Furniture Factory for Sale.

Parties interested in the purchase of a furniture factory, drydock, etc., are invited to correspond with W. H. Savedge, cashier, Wakefield, Va., who will sell at public auction on January 6, 1910, the plant formerly operated by the Wakefield Manufacturing Co. It is equipped with improved machinery and is offered on liberal terms.

Light and Power Plant for Sale.

Changing the operation of its plant from steam to hydro-electric current, the Thornton Light & Power Co., Hickory, N. C., offers for sale its entire steam plant and electrical equipment. If they are not sold outright, proposals will be received for the plant, and stock in a new central power station accepted as payment.

Installing Refrigerating Plant.

Among recent contracts received by the Southern Pipe Covering Co., 22 Governor St., Richmond, Va., is one for installing a four-ton refrigerating plant for the storage of furs for C. Haase & Son of Richmond. The products of the Southern Pipe Covering Co. include asbestos pipe and boiler coverings, cold-storage insulation, etc.

More Plants for Gary.

The American Sheet & Tin Plate Co. will start at once at Gary, Ind., on an expenditure of \$4,500,000 for the construction of a number of plate, jobbing and sheet mills as part of the comprehensive plan for the construction of this type of mills at Gary, together with accessories to finish the various grades of products, the growing use of which demands an increased output.

Cement Plant, Planing Mill, Etc.

A retail lumber yard, planing mill and cement-block manufacturing plant is offered for sale by Charles R. Kappes, 204 Dearborn St., Chicago, Ill. This plant is located in the Shenandoah Valley of Virginia, convenient to railroads, and embraces 1½ acres of land, two-story mill with equipment, power plant, office, warehouse, cement-house, blacksmith shop and other facilities.

Exhibits at Convention of Ice Cream Manufacturers.

At the convention of ice-cream manufacturers held in Cincinnati, Ohio, from December 7 to 10, inclusive, a number of manufacturers exhibited machinery interesting to ice-cream manufacturers and others. Among the exhibitors were the Bradford Belting Co., Cincinnati; Triumph Ice Machine Co., Cincinnati; Lucas Pump Co., Dayton, Ohio; Burr Oak Belting Co., Cincinnati; H. W. Johns-Manville Company, New York city; Creamery Package Co., Chicago, Ill., and the

F. W. Niebling Co. of Norwood, Ohio, in whose space were also shown McGowan pumps, Allis-Chalmers motors and Chandler & Taylor engines.

Contracts to Be Executed in 1910.

Contracts for municipal improvements which have recently been awarded the Aetna Engineering Bureau, 125 La Salle St., Chicago, Ill., include those for preparing plans, specifications and to supervise the construction of about \$25,000 worth of paving, sewer and water improvements at Riverside, Ill., and to design and supervise the construction of a sewer system, including a disposal plant at Glen Ellyn, Ill. The estimated cost of the latter improvements is \$100,000, both contracts to be executed during 1910.

Receivership Terminated.

An announcement of Industrial Interest relates to the termination of the receivership of Milliken Bros. of Milliken, S. I., and New York city, whose affairs it temporarily placed under the protection of the Federal courts. The entire plant and all its assets have been restored to the company, the new officers and board of directors being in active control. The company will continue to manufacture structural steel in all its branches, including ornamental-iron work and galvanized-steel towers for electric transmission.

Contracts for Water-Tube Boilers.

The E. Keeler Company, Williamsport, Pa., has been awarded a contract by the Pennsylvania Railroad Co. for three 408-horse-power Keeler water-tube boilers to be installed in the new classification yards at Northumberland, Pa. The boilers will be built for a working pressure of 180 pounds per square inch and will be equipped with Green chain-grate stokers, the contract including a self-supporting steel stack lined with brick. The company has also received an order from the U. S. Engineer at Boston for three 150-horse-power water-tube boilers to be installed in fortifications at Manila, the boilers to be equipped with superheaters, and a contract for one 500-horse-power water-tube boiler for the water department of Fort Worth, Texas.

Will Exhibit at Two Shows.

Included in the list of exhibitors at the 10th International Auto Show to be held at the Grand Central Palace, New York, from December 31 to January 7, and the 10th National Auto Show to be held in Madison Square Garden, New York, from January 8 to 15, is the Merchant & Evans Company, manufacturer, importer and dealer in tin andterne plates, metals, etc., Philadelphia, Pa. At the former show this company will occupy Section C, second balcony, and at the latter, Section 500, basement, exhibiting a complete line of metals and products of its mechanical department, including the Hale-Shaw clutch from 10 horse-power to 100 horse-power for motor cars, trucks, etc. The company will also exhibit the "Star" pressed-steel tire and tool case, which it is manufacturing in 34-inch and 35-inch sizes; the "Star" baggage carrier, and its new rear-axle transmission, complete with brake, rigging and front axle.

Ohio Steam Shovel & Dredge Co.

Cincinnati capitalists have purchased the Ohio Steam Shovel Co., formerly of Toledo, Ohio, and removed the plant to Cincinnati. They have organized the Ohio Steam Shovel & Dredge Co. to operate the plant and request correspondence with prospective purchasers of 30, 50 and 70-ton steam shovels, or on dipper dredges, of which the company will also make a specialty. The company can make immediate delivery of its 30-ton steam shovel mounted on either traction wheels or on standard railway gauge trucks, and of its 45-50-ton boom pattern three-engine 54-inch horizontal boiler Ohio shovel, and can deliver its 70-ton boom machine in 30 days. F. A. Peckham and H. L. Hoeffer, both of Cincinnati, and P. B. Warner, 916-17 Pennsylvania Bldg., Philadelphia, are interested in the new enterprise. Earl J. Banta, M.E., who has been mechanical engineer of the Panama Canal for several years, is chief engineer of the company and in charge of the designing and shop-production departments. The company is preparing a new catalogue and announces that requests for it should be mailed at once.

A New Repair Department.

The new eight-story building, with approximately 220,000 feet of floor space devoted partly to the manufacture of detail electrical apparatus, which the Westinghouse Electric & Manufacturing Co. of Pittsburgh,

Pa., recently placed in service, contains a new department for handling repair work. The need of this department has been felt for some time in order to insure prompt attention and quick deliveries. Not having a large space on its 47-acre plot unoccupied, the company was compelled to erect its new building higher than it would otherwise have done. The building is 70x400 feet, the distance from the ground to the cornice being 130 feet. It is of skeleton self-contained steel and brick construction and is as nearly fire-proof as possible. A shipping platform parallelled by a railroad siding extends the full length of the building. The ground floor is connected with other sections of the plant by a narrow-gauge industrial railway, and the second floor is connected with other buildings by covered bridges. The building is equipped with one large freight elevator and five high-speed combination elevators, electrically operated by Westinghouse motors. It provides space for practically doubling the present output of detail apparatus and affords ample room for a large volume of repair work.

Important Portland Cement Contracts.

Continued construction activity brings many contracts to the cement manufacturer. The leading operators of cement plants have found the demand satisfactory during the year and a number of contracts were awarded for considerable quantities of Portland cement. Prominent among Portland-cement manufacturers is the Security Cement & Lime Co. (successor to the Maryland Portland Cement Co.) of Baltimore, Md., and this company received some of the most important contracts of 1909. These orders included 10,000 barrels for sewerage system construction, 6000 for Fidelity Building enlargement, 5000 barrels for Harriet Lane Hospital, 1500 barrels for Forest Park reservoir and 1200 barrels for harbor pier No. 2, all at Baltimore, Md., the contracts being placed through the National Building Supply Co. of Baltimore; 10,000 barrels for Trinity Church, Miller Garage and First National Bank, Hagerstown, Md., the contracts being placed through Victor Cushman & Sons of Hagerstown; 5000 barrels for street improvements at York, Pa., the contract being placed through Zinn Bros. of York; 11,000 barrels for Southern Railway improvements at Lynchburg, Va., the contractor being W. J. Oliver, and 1000 barrels for an electric-plant power dam at Thurmont, Md., L. R. Waesche of Thurmont being the contractor.

TRADE LITERATURE.

George P. Clark Co.'s Matting Card.

A matting card illustrating an extensive line of trucks, casters, etc., has recently been issued by the George P. Clark Co., manufacturer of trucks and casters, Windsor Locks, Conn. The card was designed by the advertising department of this company, which will mail it to parties requesting it.

Penberthy Engineer and Fireman.

The Penberthy Engineer and Fireman for December, a monthly publication issued by the Penberthy Press, Detroit, Mich., is now being circulated. This little magazine contains articles of interesting and valuable information, including selections from the Southern Engineer, The Power House, Steam, Iron Trade Review, Mechanical Digest, Electrical World and other publications.

New from Cover to Cover.

Perhaps nothing is more appropriate or acceptable as a Christmas gift than a valuable and attractive dictionary. In this connection it may be stated that Webster's new International dictionary has just been issued, containing 2700 pages, more than 6000 illustrations and 400,000 words and phrases. It is new from cover to cover and presents the best in scholarship, convenience, authority and utility. W. T. Harris, former United States Commissioner of Education, is the editor-in-chief, and the G. & C. Merriam Company of Springfield, Mass., is the publisher.

Plurality Die Bolt Cutters.

The "Plurality" die bolt cutters are said to be plain, simple and substantial, designed and built along modern lines and conveniently and quickly operated. Quick change, durability of the dies and low cost of maintenance are among the important features claimed for these machines. They are manufactured by the Mummert, Wolf & Dixon Co., Hanover, Pa., and are described and illustrated in a booklet which the company is distributing. This company is also presenting a folder illustrating and describing its universal revolving oilstone edge-tool grinder and other literature relating to its products.

Moyer Tramrail for the Foundry.

Among labor-saving devices introduced into American foundries in recent years which have figured as a cost-reducing factor is the Moyer overhead tramrail. This system consists of an overhead rail hung from the roof trusses by means of hangers so suspended that a load of hot metal, pig-iron, sand, cores, flasks or finished castings may be run along on a trolley. The trolley has anti-friction bearings and operates so easily that a load of 1500 to 2000 pounds can be moved by one man with less exertion than is required to carry a 50-pound load by hand. The Moyer tramrail system is illustrated and described in Bulletin No. 20, issued by the Moyer tramrail department of J. W. Paxson Company, engineer, designer and manufacturer of foundry equipment and supplies, Philadelphia, Pa.

The Brownell High-Speed Engines.

The best interests of engine purchasers are very often prohibited by limiting the first cost of an engine, thereby eliminating from competition reliable and competent builders. Among the manufacturers of engines whose products have been in service for many years, having been purchased by competent engineers for exacting service, efficiency and durability, is the Brownell Company, Dayton, Ohio. This company's shops are so situated as to be afforded the best shipping facilities for both the raw material and the finished product, and are conveniently equipped with labor-saving devices, including special tools, compressed air, electric traveling cranes, jigs, templates and other facilities. The company has recently issued a new catalogue, No. 65, which illustrates and describes its high-speed, high-grade automatic engines, designed especially for electric and high-grade power purposes.

The Ryerson Reference Book.

In order to satisfactorily serve the diversified interests to which they cater, Joseph T. Ryerson & Son of Chicago, Ill., have been forced to add to their line numerous specialties which, through lack of space, they have been unable to illustrate in Ryerson's Monthly Journal and Stock List. For some time they have felt the necessity of supplementing their little book published monthly with a publication which would comprehensively illustrate their complete line in a convenient form for ready reference. With this idea in mind they have compiled and issued Ryerson's Reference Book, which contains 380 pages and is durably and attractively bound. It embraces, in addition to the regular lines of iron, steel and machinery, illustrations and descriptive data of numerous specialties, with useful tables and information for engineers, architects, contractors, structural-iron workers, sheet-metal workers, manufacturers and users of machinery, steam boilers, tanks, stacks, etc., implement manufacturers, railroads, mines, shipyards and all users of iron, steel and other equipment.

STRINGER'S RIDGE TUNNEL.

A Progressive Highway Policy Near Chattanooga.

[Special Cor. Manufacturers' Record.]

Chattanooga, Tenn., December 11.

Chattanooga is situated in a valley on the banks of the Tennessee River, which makes an immense bend here, forming the boundary line for two sides of the city. The city itself is partly built upon hills. It is surrounded on every side by mountains and ridges. Particularly to the north and east there is difficulty of communication with the surrounding country on account of the absence of any natural gaps in the high ridges.

To the north the river is crossed by a steel bridge built by Hamilton county, in which the city is situated. By the Dry Valley road the top of Stringer's Ridge is one mile from the north end of the bridge. This macadam road is the means of communication with Dry Valley, which extends to the north for 80 miles by the side of Waldens Ridge. It is also used to reach the summer resort on Waldens Ridge, as well as Marion county. The grade of the Dry Valley road ranged from 7 to 10 per cent., or 7 to 10 feet rise to the 100 feet. Judge Seth M. Walker, chairman of the county court, recommended that a heavy cut be made in the top of Stringer's Ridge for the road in order to reduce the climb and the grade.

W. L. Dodds, the county engineer, recommended that a tunnel be built, as this could be done without spoiling the road on top of the ridge. In case of a cut it would break communication along the length of the ridge, necessitating a bridge at any time a road were built for that purpose.

The tunnel plan was adopted by Judge Walker and the county court. The county engineer made the plans, and all of the work has been done by the county convicts under his supervision except some carpenter work. The tunnel is 300 feet long from portal to portal, 30 feet wide and 23 feet high. The portals are constructed of concrete, reinforced by steel bars. The lining is of concrete. The side walls are 30 inches thick and the arch is 24 inches thick. The tunnel is lighted by electricity. The tunnel floor is 65 feet below the road above it. By the use of the tunnel the old grade of 7 to 10 per cent. is avoided, and the extreme grade going north has been reduced to 5.1 per cent., while the greatest grade encountered going south toward the city is 4 per cent., and most of the heavy loads move in the direction of the city. The distance traveled in going over the ridge has been reduced by about one-third of a mile by the use of the tunnel.

The tunnel has just been completed. While Mr. Dodds has not yet compiled all of the figures, it is estimated that it has cost the county about \$35,000, while if the county had let the work to contract it would probably have cost from \$45,000 to \$50,000.

It has long been a settled policy for our county to employ their convicts in building public roads, and Hamilton county is noted for her fine macadam roads.

T. B. COLBURN.

FINANCIAL NEWS

The MANUFACTURERS' RECORD invites information about Southern financial matters. Items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

Review of the Baltimore Market.

Office MANUFACTURERS' RECORD,
Baltimore, Md., December 15.

The Baltimore stock market during the past week was active. In the trading United Railways common sold from 13 3/4 to 14 1/4; do. trust certificates, 14 1/4; do. incomes, 60 1/2 to 60; do. funding 5s, 84 1/4 to 84 3/4; do. funding scrip, 84 to 84 1/4; do. 4s, 87 to 87 3/4; Consolidated Gas 6s, 100 1/4 to 100; do. 5s, 109 1/2 to 110; Seaboard Air Line common, 23 3/4 to 24 1/4; do. preferred, 35 to 34 1/2; Seaboard Company common, 27 1/4 to 26 1/2, last sale at 27; do. first preferred, 81 1/4 to 81; do. second preferred, 46 to 47 1/2, last sale at 47; Seaboard 4s, 84 to 84 1/4; do. do. certificates, 84 to 84 1/4; do. three-year 5s, 99; do. 10-year 5s, 90 1/4 to 90 1/2; do. adjustment 5s, 73 3/4 to 73 3/4; Consolidated Cotton Duck, 6 1/4 to 7; do. preferred, 20 to 21 1/4; Mt. Vernon-Woodberry Cotton Duck 5s, 78 to 78 3/4; G.-B.-S. Brewing 1sts, 42 to 43.

Mechanics' Bank sold at 28 1/2 to 29; Merchants' Bank, 108 1/2 to 108; Bank of Commerce, 30 1/4; American Bonding, 75 1/2 to 78 1/2; Mercantile Trust, 150 to 150, last sale at 154 1/4; Maryland Trust common, 75 to 80; Maryland Casualty, 124 1/4 to 125; Continental Trust, 223 to 222 1/4; International Trust, 137; United States Fidelity, 140.

Other securities were traded in thus: Georgia & Florida common, 12 to 12 1/2; George's Creek Coal & Iron, 101; Houston Oil common, 8 1/4 to 9 1/4; do. preferred, 30 1/2 to 43, last sale at 42; Atlantic Coast Line 4s, certificates, 101 1/4 to 103; Augusta Railway & Electric 5s, 101 1/4; Carolina Central 4s, 93; City & Suburban (Wash-

ington) 5s, 102 to 103; Georgia & Alabama Consolidated 5s, 105 to 105 1/4; Maryland Electric 5s, 97 1/4 to 97 1/4; Norfolk Railway & Light 5s, 97; Norfolk Street Railway 5s, 106; Virginia Midland 5th 5s, 106 1/2 to 106 3/4; Milwaukee Gas 4s, 90 1/2 to 90 3/4; Northern Central Railway stock, 106 to 112; Consolidation Coal, 111 to 112; Fairmont & Clarksburg Traction 5s, 96; Norfolk & Portsmouth Traction 5s, 81 to 84 1/2, last sale at 83 3/4; Maryland 3s, 1909-1914, 95 1/4; Atlantic Coast Line common, 135 to 136 1/2; American Caramel preferred, 100 1/4; Atlantic Coast Line Consolidated 4s, 94 1/2; Baltimore City 3 1/2s, 1928, 90; City & Suburban (Baltimore) 5s, 107 1/4; Georgia Southern & Florida 5s, 108; Alabama Consolidated Coal & Iron 5s, 83 1/4 to 82 1/2; Consolidation Coal refunding 4 1/2s, 95 to 94 1/2; Baltimore City Passenger 4 1/2s, 98 1/2; Georgia, Carolina & Northern 5s, 105 1/2; Northern Central 4 1/2s, 106; Fairmont & Clarksburg Traction preferred, 76 1/2; Georgia Southern & Florida first preferred, 94 1/2; Baltimore Brick common, 3 1/2; Virginia Railway & Power common, 20 to 21 1/4; Atlantic Coast Line of Connecticut 4s, 5-20s, 93 3/4; Kansas City Western Railway refunding 5s, 94 1/2; Virginia Electric Railway & Development 5s, 102 1/2; Maryland Club 4 1/2s, 100 1/4; Baltimore, Sparrows Point & Chesapeake 4 1/2s, 93; Charleston Consolidated Electric 5s, 90; Canton Company, 101; Maryland, Delaware & Virginia preferred, 14; Norfolk & Portsmouth Traction common, 19 1/4; Florida Southern 4s, 93 1/4 to 93; Georgia Pacific 1sts, 113 3/4; Macon Railway & Light 5s, 95.

SECURITIES AT BALTIMORE.

Last Quotations for the Week Ended
December 15, 1909.

Railroad Stocks.	Par.	Bid.	Asked.
Atlantic Coast.....	100	136	136
Atlantic Coast of Conn.....	100	325	335
Georgia Sou. & Fla.....	100	30	40
Georgia Sou. & Fla. 1st Pfd.....	100	94 1/2	94 1/2
Georgia Sou. & Fla. 2d Pfd.....	100	94 1/2	94 1/2
Norfolk Railway & Light.....	25	19 1/2	19 1/2
Seaboard Company Common.....	100	26 1/2	27
Seaboard Company 1st Pfd.....	100	79	82
Seaboard Company 2d Pfd.....	100	46 1/2	47
United Rys. & Elec. Co.....	50	137 1/2	144 1/2

Bank Stocks.	Par.	Bid.	Asked.
Citizens' National Bank.....	10	39 1/2	39 1/2
Drovers & Mech. Nat. Bank.....	100	220	220
First National Bank.....	100	135	140
Merchants' National Bank.....	100	168 1/2	168 1/2
National Bank of Baltimore.....	100	124	126
National Exchange Bank.....	100	157	158
National Howard Bank.....	10	39 1/2	39 1/2
National Marine Bank.....	10	39 1/2	39 1/2
National Mechanics' Bank.....	10	28	30
National Union Bank of Md.....	100	122	125
Second National Bank.....	100	195	195
Third National Bank.....	100	135	135

Trust, Fidelity and Casualty Stocks.	Par.	Bid.	Asked.
American Bonding Co.....	25	77	78 1/2
Baltimore Trust & Guarantee.....	100	302 1/2	310
Colonial Trust.....	50	27 1/2	29
Continental Trust.....	100	222 1/2	225
Fidelity & Deposit.....	100	210	225
Fidelity Trust.....	100	137 1/2	137 1/2
International Trust.....	100	137 1/2	137 1/2
Maryland Casualty.....	25	125	125
Maryland Trust.....	100	76	80
Maryland Trust Pfd.....	100	104	107
Mercantile Trust & Deposit.....	50	153 1/2	155

Miscellaneous Stocks.	Par.	Bid.	Asked.
Ala. Con. Coal & Iron.....	100	26	32 1/2
Ala. Con. Coal & Iron Pfd.....	100	80	80
Con. Cotton Duck Common.....	50	64	64
Con. Cotton Duck Pfd.....	50	22 1/2	22 1/2
Con. Gas, Elec. Lt. & P. Com.....	34	28	30
Con. Gas, Elec. Lt. & P. Pfd.....	100	80	81 1/2
Consolidation Coal.....	100	111	111
Georges Creek Coal.....	100	105	115
Mer. & Miners' Trans. Co.....	100	86	86

Railroad Bonds.	Par.	Bid.	Asked.
Atlantic Coast Line 1st 4s, 1952.....	100	94 1/2	95
Atlantic Coast Line 4s, Cfs.....	100	102 1/2	102 1/2
At. Coast Line (L. & N.) Col. Tr. 4s.....	100	90 1/2	91
Atlan. Coast Line (Conn.) 4s, Cfs.....	100	87 1/2	87 1/2
Atlan. Coast Line (S. C.) 4s, 1948.....	100	97	98 1/2
Balto. & Harrisburg 5s, 1936.....	100	105	105
Balto. & Harrisburg Ext. 5s, 1938.....	100	102 1/2	102 1/2
Charleston & West. Car. 5s, 1946.....	100	106	107
Coal & Coke Railway 5s.....	100	95	95
Coal & Iron Railway 5s, 1920.....	100	102 1/2	102 1/2
Col. & Green. 1st 6s, 1916.....	100	106	108 1/2
Georgia & Alabama 5s, 1943.....	100	105 1/2	106 1/2
Ga., Car. & North. 1st 5s, 1929.....	100	105 1/2	105 1/2
Georgia Pacific 1st 6s, 1922.....	100	113 1/2	114
Georgia South. & Fla. 1st 5s, 1945.....	100	107 1/2	107 1/2
Maryland & Penna. 4s, 1951.....	100	82	82
Macon, Dublin & Savannah 5s.....	100	96 1/2	97 1/2
Piedmont & Cum. 1st 5s, 1911.....	100	90 1/2	90 1/2
Piedmont Valley 1st 5s, 1911.....	100	105	105
Richmond & Danville Deb. 5s.....	100	105	107 1/2
Seaboard Air Line 4s, 1950.....	84	84 1/2	84 1/2
Seaboard Air Line 5s, 10-year, 1911.....	100	99 1/2	99 1/2
Seaboard Air Line 5s, 3-year.....	99	99 1/2	99 1/2
Seaboard & Roanoke 5s, 1928.....	100	105 1/2	105 1/2
Suffolk & Carolina 5s, 1952.....	94	94	94
Virginia Midland 2d 6s, 1931.....	100	100 1/2	100 1/2
Virginia Midland 5th 5s, 1926.....	100	106	107
Washington Terminal 3 1/2s.....	90	90 1/2	90 1/2
Western Maryland 4s, 1952.....	100	85 1/2	85 1/2
Western N. C. Con. 6s, 1914.....	100	107	107

West Va. Cent. 1st 6s, 1911.....	101 1/4	101 1/4
Wilmington & Weld. Gold 5s, 1935.....	108	112
Street Railway Bonds.		
Anacostia & Potomac 5s, 1949.....	101	102 1/2
Augusta Ry. & Elec. 5s, 1940.....	101 1/2	101 1/2
Balto. City Pass. 5s, 1911.....	100 1/2	100 1/2
Balto. City Pass. 4 1/2s.....	99 1/2	99 1/2
Balto., Sp. Pt. & C. 4 1/2s.....	93	94
Charleston City Ry. 5s, 1923.....	104	105 1/2
Charleston Con. Electric 5s, 1939.....	90	92 1/2
City & Suburban 5s (Balto.), 1922.....	107 1/4	107 1/4
City & Suburban 5s (Wash.), 1948.....	102 1/2	103
Knoxville Traction 1st 5s, 1928.....	105	105 1/2
Lake Roland Elevated 5s, 1942.....	112 1/4	114
Lexington Railway 1st 5s, 1949.....	90	97
Maryland Electric Railway 5s.....	97 1/2	97 1/2
Memphis Street Railway 5s.....	99	99 1/2
Metropolitan 5s (Wash.), 1925.....	108	111
Newport News & Old Pt. 5s, 1938.....	93	93
Norfolk & Portsmouth Trac. 5s.....	83 1/2	84
Norfolk Railway & Light 5s.....	96	97 1/2
Norfolk Street Railway 5s, 1944.....	105	105
United Railways 1st 4s, 1949.....	87 1/4	87 1/4
United Railways Inc. 4s, 1949.....	60 1/4	60 1/4
United Railways Funding 5s.....	84 1/4	84 1/4

Miscellaneous Bonds.		
Ala. Con. Coal & Iron 5s.....	82 1/2	83
Atlanta Gas 1st 5s, 1947.....	102	102
Electric 5s.....	99	99 1/2
Consolidated Gas 6s, 1910.....	100 1/4	100 1/4
Consolidated Gas 5s, 1939.....	110	110 1/2
Consolidated Gas 4 1/2s.....	95	95
Consolidation Coal Ref. 4 1/2s.....	95	95
Con. Gas, Elec. Lt. & P. 4 1/2s.....	83	83 1/2
Fairmont Coal 1st 5s.....	96 1/2	97
G.-B.-S. Brewing 1st 4s.....	43	43 1/2
G.-B.-S. Brewing Inc. 4s.....	12 1/2	12 1/2
Maryland Telephone 5s.....	98	99 1/2
Mt. Vernon-Woodbury Cot. Duck 5s.....	77 1/2	78 1/2
United Elec. Lt. & P. 4 1/2s.....	92 1/2	92 1/2

SOUTHERN COTTON-MILL STOCKS.

Quotations Furnished by Hugh Mac-
Rae & Co., Wilmington, N. C., for
Week Ending December 13.

	Bid.	Asked.
Abbeville Cotton Mills (S. C.).....	70	71
Aiken Mfg. Co. (S. C.).....	85	85
American Spinning Co. (S. C.).....	155	155
Anderson Cotton Mills (S. C.).....	54	56
Arkwright Mills (S. C.).....	100 1/2	106
Augusta Mills (S. C.).....	115	115
Avondale Mills (S. C.).....	120	125
Belton Mills (S. C.).....	120	120
Bibb Mfg. Co. (Ga.).....	114	114
Brandon Mills (S. C.).....	97	100
Cabarrus Cotton Mills (N. C.).....	125	145
Chadwick-Hoskins Mfg. Co. (N. C.).....	100	100
Chadwick-Hoskins Mfg. Co. (N. C.) Pfd.....	102	102
Chiquola Mfg. Co. (S. C.).....	165	167
Clifton Mfg. Co. (S. C.).....	105	110
Clifton Mfg. Co. (S. C.) Pfd.....	99	101
Clinton Cotton Mills (S. C.).....	120	130
Columbus Mfg. Co. (Ga.).....	93	98
Courtenay Mfg. Co. (S. C.).....	97	100
Dallas Mfg. Co. (Ala.).....	97	105
Darlington Mfg. Co. (S. C.).....	78	82 1/2
Drayton Mfg. Co. (Ala.).....	100	100
Eagle & Phenix Mills (Ga.).....	135	135
Easley Cotton Mills (S. C.).....	165	170
Enoree Mfg. Co. (S. C.).....	62	62
Enoree Mfg. Co. (S. C.) Pfd.....	95	100
Enterprise Mfg. Co. (Ga.).....	80	90
Exposition Cotton Mills (Ga.).....	240	240
Gaffney Mfg. Co. (S. C.).....	80	82
Gainesville Cotton Mills (Ga.).....	68	73
Granby Cot. Mills (S. C.) 1st Pfd.....	50	50
Granville Mfg. Co. (S. C.).....	160	165
Greenwood Cotton Mills (S. C.).....	58 1/2	68
Grendel Mills (S. C.).....	110	112
Henrietta Mills (N. C.).....	175	175
King Mfg. Co. (S. C.).....	95	109
Lancaster Cotton Mills (S. C.).....	109	140
Lancaster Cot. Mills (S. C.) Pfd.....	97	100
Langley Mfg. Co. (S. C.).....	96	100
Laurens Cotton Mills (S. C.).....	120	135
Limestone Mills (S. C.).....	150	175
Lockhart Mills (S. C.).....	78	90
Lockhart Mills (S. C.) Pfd.....	99	100
Loray Mills (N. C.) Pfd.....	95	97 1/2
Marlboro Cotton Mills (S. C.).....	80	80
Mary Mfg. Co. (S. C.).....	165	165
Mills Mfg. Co. (S. C.) Pfd.....	97	100
Mills Mfg. Co. (S. C.) Pfd.....	109	109
Monaghan Mills (S. C.).....	130	135
Monaghan Cotton Mills (S. C.).....	110	110
Newberry Cotton Mills (S. C.).....	125	140
Norris Cotton Mills (S. C.).....	122	125
Olympia Cot. Mills (S. C.) 1st Pfd.....	85	90
Orangeburg Mfg. Co. (S. C.) Pfd.....	80	88
Orr Cotton Mills (S. C.).....	101	101
Pacolet Mfg. Co. 1st Pfd.....	97	102
Pelzer Mfg. Co. (S. C.).....	150	160
Piedmont Mfg. Co. (S. C.).....	173	177
Poe Mfg. Co. (S. C.).....	160	165
Richland Cot. Mills (S. C.) 1st Pfd.....	45	45
Raleigh Cotton Mills (N. C.).....	100	105
Roanoke Mills (N. C.).....	153	165
Saxon Mills (S. C.).....	127	127
Sibley Mfg. Co. (Ga.).....	62 1/2	65
Spartan Mills (S. C.).....	130	140
Springdale Mills (S. C.).....	100	100
Tucapau Mills (S. C.).....	250	250
Trion Mfg. Co. (Ga.).....	140	140
Union-Buttalo Mills (S. C.) 1st Pfd.....	65	73
Victor Mfg. Co. (S. C.).....	135	135
Warren Mfg. Co. (S. C.).....	93 1/2	95
Warren Mfg. Co. (S. C.) Pfd.....	106	106
Washington Mills (Va.).....	28	28
Whitney Mfg. Co. (S. C.).....	115	115
Whitney Mfg. Co. (S. C.) Pfd.....	115	115
Wiscasset Mills (N. C.).....	120	132
Woodruff Cotton Mills (S. C.).....	140	155
Woodside Cotton Mills (S. C.).....	97	100
Woodside Cot. Mills (S. C.) Pfd.....	95	98

Quotations Furnished by William S.
Glenn, Broker, Spartanburg, S. C.,
for Week Ending December 13.

	Bid.	Asked.
Abbeville Cotton Mills (S. C.).....	75	75
Aiken Mfg. Co. (S. C.).....	85	85
American Spinning Co. (S. C.).....	190	190
Arendale Mills (S. C.).....	95	95
Arkwright Cotton Mills (S. C.).....	100	105
Augusta Factory (Ga.).....	65	70
Avondale Mills (Ala.).....	116	116
Belton Mills (S. C.).....	120	120
Brogan Mills (S. C.).....	30	37
Cannon Mfg. Co. (N. C.).....	135	135
Cabarrus Cotton Mills (N. C.).....	130	135
Chiquola Mfg. Co. (S. C.).....	160	164
Clifton Mfg. Co. (S. C.).....	120	125
Clinton Cotton Mills (S. C.).....	106	110
Columbus Mfg. Co. (Ga.).....	93	100
Courtenay Mfg. Co. (S. C.).....	96	96

Dallas Mfg. Co. (Ala.).....	99	99
Darlington Mfg. Co. (S. C.).....	76	88
D. E. Converse Co. (S. C.).....	100	105
Drayton Mills (S. C.).....	117	12

Okl., Albany.—Official: The Albany State Bank chartered; capital \$10,000; directors, P. L. Cain, president, Albany; J. M. Graham, vice-president, Utica, Okla.; E. F. Rines, Durant, Okla.; S. D. Halsell, Wade, Okla., and J. G. Worthy, Albany.

Okl., Butler.—The Guarantee State Bank is reported chartered with \$10,000 capital; incorporators, E. K. Thurman, S. J. Jackson and J. T. Thurman.

Okl., Cestos.—Official: The Citizens' State Bank chartered; capital \$10,000; directors, C. H. Cofer, F. A. Carmony, W. H. Hayes, V. Cuberly and W. F. Cuberly.

Okl., Coweta.—Security Abstract Co. of Wagoner county, capital \$10,000, is reported incorporated by C. E. Trumbo, R. M. Franks, W. S. Bailey, R. C. Allen, J. C. Parson and C. K. Leslie.

Okl., Enid.—The Pioneer Finance Co. is reported organized with \$10,000 capital; H. W. Herndon, president; J. H. Montay, vice-president, and J. M. Herndon, secretary and treasurer.

Okl., Grainola, P. O. Salt Creek.—Official: The Grainola State Bank chartered and incorporated; capital \$10,000; incorporators and directors, H. Keeney, E. V. Keeney, J. N. Keeney and E. F. Keeney.

Okl., Okmulgee.—Approved: Farmers' National Bank; capital \$50,000; organizers, J. W. Hensel of Porter, Okla.; Lawrence Wright, W. S. Vernon, T. T. Loy and W. E. Rowsey.

Okl., Oklahoma City.—The Union Bond & Investment Co. is reported incorporated with \$25,000 capital by George E. Swisher, George H. Anderson and M. T. Swisher.

Okl., Sapulpa.—Reports state that a bank is to be organized with \$10,000 capital. J. H. Anderson of Oklahoma City is said to be interested.

Okl., Sayre.—Official: The Oklahoma State Bank organized with \$25,000 capital; Geo. C. Whitehurst, president; J. M. Shelton, vice-president.

Okl., Tahlequah.—The Cherokee Capital Abstract Co. is reported incorporated with \$3000 capital by Frank R. Lewis, Fred M. Lewis and Charles W. Westerheide.

Okl., Tulsa.—Official: The Merchants and Planters' Bank chartered; capital \$20,000; G. N. Wright, Jr., president; Ross Grosshart, vice-president; F. A. Haver, cashier, and W. E. Dordon and James E. Sanger, directors.

S. C., Belton.—The People's Bank of Belton, S. C., has been granted a commission; capital \$20,000. The incorporators are W. K. Stringer, W. D. Cox and Thomas Allen.

S. C., Columbia.—The Farmers' Union Bank & Trust Co., capital \$25,000, is reported incorporated by H. A. Gibson, J. H. Claffey, T. R. McCants, Wm. Bryce and W. S. Barton, Jr.

S. C., Dillon.—The Merchants and Planters' Bank is reported incorporated with \$25,000 capital by L. C. Braddy, J. W. Gaddy and T. L. Bass.

Tenn., Union City.—Official: The Old National Bank, capital \$75,000, surplus \$15,000, organized with L. S. Parks, president; J. S. Roberts, vice-president; Walter Howell, cashier, and E. V. Caldwell and J. A. Hipley, assistant cashiers.

Tex., Belton.—Reported that a State bank is to be established with \$25,000 capital. Otho Houston of Fort Worth and A. J. Embree are said to be interested.

Tex., Celina.—The Celina State Bank of Celina is reported incorporated with \$10,000 capital by J. M. Lewis, M. Button and T. H. Fowler.

Tex., Denton.—The Bankers & Citizens' Co-operative Life Insurance Co. is reported chartered by Dr. J. P. Blount, J. W. Cook, B. H. Deavenport, R. H. Hopkins, Jr., Dr. M. L. Martin, C. A. Smith and W. D. Birdsong.

Tex., Gilmer.—Official: A State bank capitalized at \$25,000 has been organized with officers thus: W. L. Willeford, president; L. C. Turner, vice-president; R. B. Nelson, cashier; directors, M. P. Mell, R. L. Mattox, F. L. Putrell, W. L. Willeford, W. W. Sanders, R. B. Nelson and S. J. Waghalter.

Tex., Kemp.—The Farmers' Guaranteed State Bank is reported organized with \$10,000 capital.

Tex., Pickton.—The First State Bank, capital \$10,000, is reported organized with W. P. Gibson, president; Alf Morris of Winnsboro and Dr. Z. G. Miller of Pickton, vice-presidents, and S. M. Gibson, cashier.

Tex., San Antonio.—The Rio Grande Fire Insurance Co. is reported organized with \$500,000 capital.

Tex., Spur.—Official: The Spur National Bank chartered; capital \$100,000. Directors, R. V. Colbert, president; C. A. Jones, vice-president; W. G. Sherrod, cashier; E. P. Swenson, A. J. Swenson, W. T. Andrews, F.

S. Hastings, P. P. Berthelot and R. C. Forbis; C. G. Chandler is assistant cashier.

Tex., Temple.—The McCelvey Loan & Investment Co. is reported chartered with \$150,000 capital by G. C. McCelvey, J. S. McCelvey, H. M. McCelvey and others.

Va., Mt. Solon.—Official: The Mt. Solon Bank chartered; capital \$10,000 to \$50,000; M. Bruch Whitmore, president; S. A. Stover, first vice-president; A. T. Reeves, second vice-president; W. B. Todd, cashier; C. L. Branaman, Gull Barber, S. A. Shaver and E. M. Dudley.

Va., Vinton.—The People's Bank of Vinton is reported organized with \$50,000 capital; C. C. Thomas, president; Marshall Cook, vice-president, and J. W. Penn, cashier.

W. Va., Buffalo.—The Farmers and Merchants' Bank of Buffalo is reported incorporated with \$25,000 capital by E. M. Carver, Harrisville, W. Va.; D. C. Shaw, W. W. Shock, E. G. Wheeler and M. G. Carver, all of Rowlesburg, W. Va.

NEW SECURITIES.

Ala., Linden.—It is reported that \$10,000 of 5 per cent. school bonds are being offered for sale. Address The Mayor.

Ala., Tuscaloosa.—Bids will be received until 7 P. M. December 20, it is stated, for \$30,000 of school and \$25,000 of sewer 5 per cent. bonds. W. M. Faulk is Mayor.

Fla., Pensacola.—An official letter confirms the report that the \$100,000 of 4½ per cent. 30-year paving, grading and curbing bonds were purchased by W. W. Flournoy of De Funiak Springs, Fla.

Ga., Cuthbert.—Official: The \$20,000 of 5 per cent. 30-year water and light improvement bonds have been purchased by John W. Dickey of Augusta, Ga., at \$20,774, accrued interest and printing of bonds.

Ga., Edison.—December 21, it is reported, an election will be held to vote on \$17,000 of water-works, \$8000 of electric-light and \$8000 of school 5 per cent. bonds.

Ga., Greenville.—C. R. Williams, Mayor, will receive bids until noon January 4 for \$8000 of 5 per cent. electric-light bonds, \$6000 of 5 per cent. sewer bonds and \$16,000 of 5 per cent. water-works bonds.

Ga., Macon.—Voted.—\$200,000 of bonds for paving and sewerage in Vineland.

La., Robeline.—Reports state that \$14,000 of school-building bonds have been voted.

Ga., Milledgeville.—The Baldwin County Brick & Pottery Co. is offering for sale \$25,000 of 5 per cent. 20-year bonds.

Ga., Perry.—City is reported to have sold \$15,000 of 5 per cent. 30-year water-works bonds.

Miss., Brookhaven.—The Board of Aldermen is reported to have adopted an ordinance to issue \$12,000 of 5 per cent. city and office-building bonds. It is said the bonds will be sold December 30.

Miss., Meridian.—The question of holding an election to vote bonds for road improvement is reported under consideration.

Mo., California.—Official: Little & Hays of St. Louis have purchased the \$30,000 of 5 per cent. 20-year water-works bonds voted November 30.

Mo., Columbia.—Reports state that \$20,000 of Boone county jail bonds were defeated.

Mo., Moberly.—Bids will be received until noon January 3 for \$100,000 of 5 per cent. 10-20-year water-works bonds. Rolla Rothwell is Mayor, and J. F. Curry, City Clerk.

Mo., Vandalia.—J. O. Barrow, City Clerk, writes that \$25,000 of bonds for sewerage and water-works purposes have been voted, but bonds will not be offered for sale until water has been found in sufficient quantities to answer all purposes. Well is now being drilled.

Mo., Webb City.—Official: M. W. Halsey & Co. of Chicago have purchased at \$295.55 premium the \$11,500 of 5 per cent. 10-20-year funding bonds.

Mo., Webb City.—N. W. Halsey & Co. of Chicago are reported to have been awarded at \$295.55 premium the \$11,500 of 5 per cent. 10-20-year funding bonds.

N. C., Andrews.—L. E. Bayles of Murphy is reported to have purchased \$20,000 of 30-year water and sewer bonds. H. N. Wells is Mayor.

N. C., Jonesboro.—December 28 vote will be taken on \$15,000 of water-works as well as \$10,000 of paving bonds.

N. C., Lexington.—Bids will be received until 10 A. M. January 3 for \$50,000 of 5 per cent. 30-34-year road bonds.

N. C., Manteo.—Dare county will issue \$7300 of 6 per cent. jail bonds. Address A.

V. Evans, register of deeds, or A. J. Fulcher, chairman of the Board of County Commissioners.

N. C., Morehead.—Bids will be received until noon January 17 for \$20,000 of 5 per cent. 30-year water-works bonds. W. J. Hales is secretary and treasurer.

N. C., New Bern.—Reported that the \$50,000 of street-improvement bonds have been sold at a premium of \$1800.

Okl., Broken Arrow.—Bids will be received

VIRGINIA-CAROLINA CHEMICAL CO.,
Office of Treasurer,
Richmond, Va., December 14, 1909.
DIVIDEND NO. 57.

The Board of Directors have this day declared a dividend of TWO (2%) PER CENT., the same being consecutive quarterly dividend No. 57 on the Preferred Stock of this Company, payable January 15, 1910, when checks will be mailed to all preferred stockholders of record at the close of business December 31, 1909. The Preferred Stock Bonds will be closed from 3 P. M. on Friday, December 31, 1909, to 10 A. M. Saturday, January 15, 1910.
S. W. TRAVERS,
Treasurer.

Chicago, Rock Island and Pacific Railroad Company FIVE PER CENT. GOLD BONDS OF 1913

Notice of Election to Redeem

To all Holders of above Bonds:
CHICAGO, ROCK ISLAND AND PACIFIC RAILROAD COMPANY (an Iowa corporation), having elected to redeem the entire issue of its aforesaid FIVE PER CENT. GOLD BONDS OF 1913, at a premium of two and a half per cent. (2½%) and accrued interest, pursuant to the provisions of section 6 of Article Four of its trust agreement with CENTRAL TRUST COMPANY OF NEW YORK, Trustee, dated May 1, 1903, securing said bonds, HEREBY GIVES NOTICE that it will, on FEBRUARY 1, 1910, redeem the entire outstanding amount of said bonds at par, with a premium of two and a half per cent. (2½%) and the accrued interest on said bonds to the date of redemption above designated. The Railroad Company requires that, on and after said redemption date, said bonds, accompanied by all appurtenant unmatured coupons, be presented for redemption and payment at the office of CENTRAL TRUST COMPANY OF NEW YORK, No. 54 Wall Street, Borough of Manhattan, New York City, N. Y., said office having been designated the agency of the said Railroad Company for the purpose of the aforesaid redemption and payment. Interest on all said bonds will cease from and after said February 1, 1910.

Chicago, Rock Island and Pacific Railroad Company

By GEORGE T. BOGGS, Treasurer.

The Thornton Light & Power Co. OF HICKORY, N. C.

is just changing from steam to hydro-electric generated current and will sell out its entire steam plant and electrical apparatus. If they are not sold meantime, proposals will be received by them for the entire material as an investment in some new place, and stock in a new central station taken as payment for the outfit.

Address
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IN ORDER to promptly complete the erection of a LARGE REFINERY, equipping same with the most modern machinery and begin operations on a very extensive scale to fill orders in hand, The Southern States Cotton Oil Refining Company, Wilmington, N. C., is offering for sale a limited number of its first mortgage 20 year, sinking fund 6% (semi-annual) GOLD BONDS at \$1000 each and accrued interest with a bonus of 50% in COMMON STOCK. This is UNQUESTIONABLY a CONSERVATIVE as well as a REMUNERATIVE and PROFITABLE investment.

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NEW YORK 87-89 Leonard Street PHILADELPHIA 120 Chestnut Street CHICAGO 186 Market Street

until 8 P. M. January 10 for \$37,000 of 5 per cent. water-works bonds. Address P. A. Fox, town clerk.

Okla., Chandler.—Lincoln county is reported to be offering at private sale \$150,000 of 5 per cent. bonds of road-improvement district No. 1.

Okla., Chandler.—Coffin & Crawford of Chicago are reported to have purchased \$38,000 of 4½ per cent. Lincoln county courthouse bonds.

Okla., Woodward.—Jas. N. Wright & Co. are reported to have been awarded \$26,000 of 5 per cent. 25-year water-works bonds at a premium of \$255.50. A. J. Viets is city treasurer.

Tenn., Memphis.—R. P. Lake & Son, local managers Equitable Life Assurance Society, are reported to have purchased \$125,000 of 4½ per cent. street-improvement bonds. Some time ago \$550,000 were purchased by the same concern.

Tenn., Morristown.—January 15 an election is to be held to vote on \$40,000 of Morristown sewerage bonds. John Carriger is Mayor.

Tenn., Winchester.—Reported that city has sold \$14,000 of water and electric-light plant bonds.

Tex., Austin.—The Attorney-General has approved the following securities: \$10,000 of Quinlin school-building bonds; \$100,000 of 5 per cent. 10-40-year Orange county navigation district bonds; \$3000 of 5 per cent. 15-20-year Terry county common school district No. 1 schoolhouse bonds; \$1000 of district No. 7; \$300 of district No. 66; \$1100 of district No. 15, and \$1100 of district No. 23 Wood county common school district schoolhouse bonds; \$100,000 of 4½ per cent. 20-30-year Houston street-paving bonds; \$17,000 of Waxahachie water-works bonds; \$4900 of 5 per cent. 20-year district No. 14 and \$10,000 of 5 per cent. 20-40-year district No. 4 Harris county school bonds.

Tex., Ballinger.—December 18 an election will be held in Runnels county, it is reported, to vote on \$100,000 of 5 per cent. precinct No. 1 road bonds.

Tex., Beaumont.—An election is to be held January 14 to vote on \$150,000 of Port Arthur-Nederland drainage district bonds.

Tex., Beeville.—Official: Bids will be received until 10 A. M. December 26 for \$14,000 of 5 per cent. 10-20-year bonds of school district No. 2, Bee county; denomination, \$100; date, August 13, 1909. Address W. W. Dodd, county judge.

Tex., Brownsville.—Voted: \$204,600 of district No. 1 Cameron county drainage bonds.

Tex., Corsicana.—The City Council is reported to have authorized an issue of \$20,000 of sewer bonds.

Tex., Dallas.—Bids will be received until 10 A. M. December 22 by J. L. Young, County Judge, for \$875,000 of road, bridge and viaduct bonds.

Tex., Dayton.—Shearer & Gowan are reported to have purchased \$10,000 of 5 per cent. 10-40-year school bonds.

Tex., Bovina.—It is reported that \$12,000 of school bonds have been voted.

Tex., Farwell.—Reported voted: \$20,000 of school-building bonds.

Tex., Fort Worth.—Reported that a bill is to be introduced in the City Council providing for an election to vote on \$100,000 of school bonds.

Tex., Fort Worth.—The petition of the Park Board for \$200,000 of park bonds is reported to have been denied.

Tex., Galveston.—Official: \$225,000 of 5 per cent. 40-year seawall improvement bonds were voted November 27; date, March 1, 1910; maturity, 1950; denomination, \$500. I. H. Kemper is Mayor.

Tex., Houston.—Defeated: \$235,000 of bonds of drainage district No. 3.

Tex., Pendleton.—Application is reported to have been made to the Judge of Bell county for authority to issue \$7000 of 5 per cent. 40-year school-building bonds.

Tex., Plainview.—The State Board of Education is reported to have purchased \$30,000 of 5 per cent. sewer bonds.

Tex., Rochelle.—Reported voted: \$10,000 of school-building bonds.

Tex., Richmond.—Reported that an election will be held in Fort Bend county January 4 to vote on \$150,000 of 4 per cent. 40-year road bonds.

Va., Big Stone Gap.—Reports state that all bids received December 4 for the \$30,000 of 5 per cent. 30-year street, sewer and jail bonds were rejected.

Va., Nottoway.—Nottoway county proposes to hold an election, it is stated, to vote on \$100,000 of road bonds.

Va., Portsmouth.—The question of issuing

\$200,000 of paving and other improvement bonds is reported under consideration.

Va., Winchester.—Reported that an election will probably soon be held to vote on \$100,000 of water bonds. H. H. Baker is Mayor.

At Morehead, N. C., bids will be received until noon January 17 for \$20,000 of 5 per cent. 20-year water-works bonds. Further particulars will be found in the advertising columns.

At Milledgeville, Ga., bids are being received for \$25,000 of 5 per cent. 20-year bonds of the Baldwin County Brick & Pottery Co. Further particulars will be found in the advertising columns.

At Greenville, Ga., bids will be received until noon January 4 for \$8000 of electric-light, \$6000 of sewer and \$16,000 of water-works bonds, all 5 per cents. Further particulars will be found in the advertising columns.

FINANCIAL NOTES.

A condensed statement of 308 State banks in Alabama at close of business October 18 shows: Loans and discounts, \$34,567,689; due from banks and bankers, \$9,578,591; cash, \$3,762,664; capital paid in, \$9,774,163; surplus and undivided profits, \$5,165,311; due to banks and bankers, \$2,925,120; deposits, \$32,658,420; total resources, \$54,550,396.

Reported that the Commercial Bank & Trust Co. and the Citizens' Bank & Trust Co., both of Yazoo City, Miss., are to be consolidated under the name of the latter institution.

The Chicago, Rock Island & Pacific Railroad Co., through George T. Boggs, treasurer, gives notice that on February 1 next it will redeem the entire outstanding amount of its 5 per cent. gold bonds of 1913 at a premium of 2½ per cent. and accrued interest, in accordance with the trust agreement. Bonds, with all matured coupons, must be presented on and after the aforesaid date at the Central Trust Co., New York city.

The Virginia-Carolina Chemical Co. announces through S. W. Travers, treasurer, that it has declared a quarterly dividend of 2 per cent. on the preferred stock, payable January 15.

PROPOSALS.

Drainage Canals

Notice is hereby given that proposals for excavating canals in the Everglades Drainage District will be received up to 12 o'clock noon on Wednesday, December 22, 1909. Each proposal must cover excavation of three hundred linear miles of canal 40 to 100 feet wide and 6 to 10 feet deep, or such other width or depth as the Trustees may in their discretion determine upon, price per cubic yard of excavation and time bidder will be ready for actual work. The successful bidder will be required to give sufficient bond under contract to complete work within time limit. Price agreed upon per cubic yard to be paid in cash as the work progresses. The contractor to furnish everything required, and no advance payments to be made. The Trustees reserve the right to contract for more or less excavating, not less than one hundred miles, and to reject any and all bids.

Bids to be addressed to Honorable A. W. Gilchrist, Governor and Chairman of Trustees of Internal Improvement Fund of Florida, Tallahassee, Florida, and marked plainly "Proposals for Drainage Canals."

W. M. McINTOSH, JR.,
Secretary.

Water-Works, Power Station and Filter Extension

WILMINGTON, N. C.
Sealed proposals will be received for material and labor in connection with the above work by the Water and Sewerage Commission of Wilmington, N. C., until twelve (12) o'clock noon of Wednesday, January 12, 1910, when they will be opened and publicly read. The improvements contemplated consist of the construction, complete, of a brick power and filter house, the construction of machinery foundations, rearrangement of machinery, the building of a radial brick stack, extensions to the filter plant, the building of a reinforced concrete sedimentation basin, and a concrete storage reservoir.

Specifications and plans will be ready for distribution on or before January 2, 1910. A complete set of prints may be procured by prospective bidders by addressing direct the Southern Map Co., Southern Building, Wilmington, N. C., at a net cost of five dollars (\$5) delivered.

Each proposal must be accompanied by a certified check in the sum of five (5) per cent. of the amount bid as evidence of good faith upon the part of the bidder.

The Commission reserves the right to reject any and all bids, or, waiving formalities, to accept any which may seem to it to be to the best interest to the city of Wilmington.

WATER AND SEWERAGE COMMISSION,
Charles W. Worth, Chairman,
Wilmington, N. C.
HAZLEHURST & ANDERSON,
Consulting Engineers,
Atlanta, Ga., Wilmington, N. C.

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A. F. JOHNSON & SON,
Clinton, N. C. Proprietors.

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Electric Light Plant

On Wednesday, December 22, 1909, the Bank of Sampson will sell under mortgage for cash at public auction at the Courthouse door in Clinton, N. C., to the highest bidder, all the property and franchises of the Clinton Electric Light Plant, including all engines, machinery, appliance poles, wire franchises, good-will, etc.

This property is located at Clinton, the county seat of Sampson county, a growing and prosperous town of 2000 inhabitants. Plant now in successful operation.

Here is an opportunity for a fine investment and one that can be made very profitable. For further information address

THE BANK OF SAMPSON,
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1 8 H. P. 500-volt 900 R. P. M. Direct-Current Westinghouse Motor, with starting box.
1 7 1/2 Vertical Engine (York).
1 25 H. P. 10x12 Orr & Sember Horizontal Engine.
1 6x4x8 Hall Duplex Plunger Steam Pump.
1 7 1/2x6x10 Deane Duplex Steam Pump, plunger pattern.

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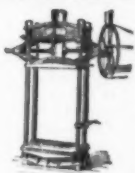
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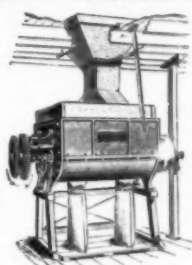
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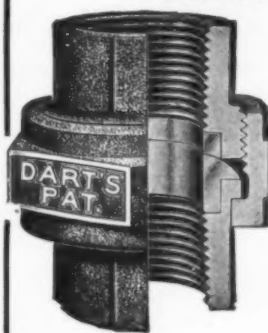
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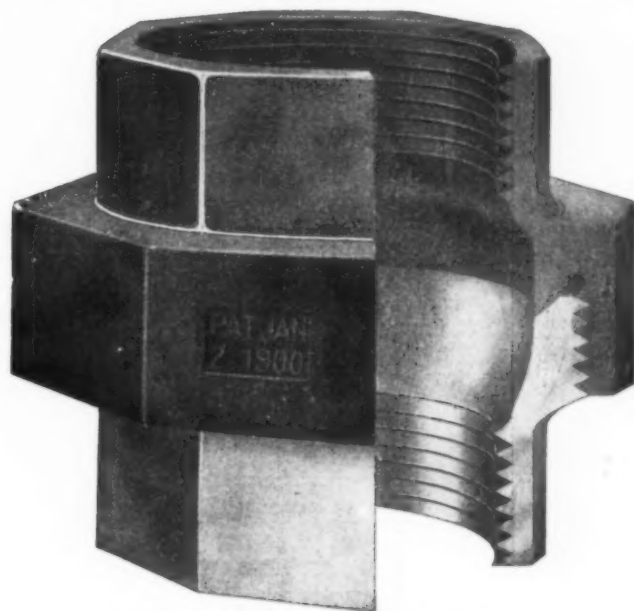
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PARTIES interested in a large hydro-electric-power in a splendid district in the Southern Appalachian region would like to hear from manufacturers who desire to make arrangements for hydro-electric-power at attractive figures. This development will be in a section of country adapted to a great variety of industries. Refer to File No. 24,977. M. V. Richards, Land and Industrial Agent, Southern Railway, Washington, D. C.

WINTER RESORT

THE CITY OF AUSTIN, located at the foot of a range of mountains, situated on the north bank of the Colorado River and overlooking a broad sweep of prairie farm land, is an ideal spot for the winter tourist in seeking both health and pleasure. Hotel accommodations are of the very best. There is good duck hunting and fishing as well as all other kind of hunting in season. Railroad facilities are of such a nature that one can make side trips to other towns and return the same day. The health rate of the city has no parallel in the State, and it has a climate that is ideal all the year round. The person or the invalid seeking both health and recreation could secure no better stopping point than Austin, Texas. If you desire any particulars regarding its many advantages, address Will L. Vining, Secretary the Austin Business League, Austin, Texas.

LOCATION WANTED

CIVIL ENGINEER AND SURVEYOR with 10 years' experience seeks good location for opening engineering office in the Southwest. Answers to P. O. Box 94, Montevallo, Ala.

INDUSTRIES WANTED

BRICK

BRICK PLANT WANTED AT COLEMAN, TEXAS.—Steel now being laid out of Coleman on the 310-mile Coleman-Texico cut-off of the Santa Fe, the best road ever built in Texas, through the best and most rapidly developing part of the United States. The Temple branch of the Santa Fe also passes through Coleman. A million bricks are needed in Coleman now, also brick to build a number of new towns on the cut-off. We have unlimited amount of best shale, abundant water, cheap fuel and are the distributing point for a large area. Ask the Commercial Club, Coleman, Texas.

FIRE BRICK

FIRE BRICK AND POTTERS' CLAY.—Excellent quality fire-brick clay, suitable for paving brick, fire brick, drain pipes and pottery; as good as any fire clay in the State; shipping facilities excellent; cheap fuel; plenty of good water; healthy country; labor plentiful; supply of clay inexhaustible. Refer to File No. 553. J. I. Hey, Auditor and Traffic Manager, Marshall & East Texas Railway, Marshall, Texas.

TILE AND SEWER PIPE PLANT

LOCATION FOR TILE AND SEWER-PIPE PLANT.—Good town on Seaboard Air Line Railway offers a material suitable for the manufacture of tile and sewer pipe; material, coal site in immediate proximity to each other, with good railroad facilities. Address J. W. White, General Industrial Agent, Seaboard Air Line Railway, Norfolk, Va.

OVERALL FACTORY

OVERALL FACTORY.—Inducements to man who knows the business and has small capital will find splendid inducements at Temple, Texas; can interest local capital; salesmen can reach 2,000,000 people in six hours out of Temple; best distributing point in Central Texas. Address Wm. M. Woodall, Sec. Temple Commercial Club, Temple, Tex.

COTTON MILL

ABILENE, TEXAS, wants a cotton mill; inexhaustible supply of pure water; steam coal at \$1.50 per ton; splendid shipping facilities; near the geographical center of the State; one-quarter million bales of cotton produced within a radius of 45 miles of the city last year. Address Abilene 25,000 Club, Box 537.

HOTELS WANTED

MARLIN, TEXAS, THE CARLSBAD OF AMERICA.—Excellent opportunity for experienced hotel people with capital to cater to high-class winter patronage. Our hot mineral water is richer than the Carlsbad water in the same properties that make that water famous. We have an established patronage all the year round of tourists and health seekers. Our water has an established reputation as a cure for rheumatism, stomach troubles and skin and blood diseases. We have first-class hotels, boarding-house and bathhouses, all doing a fine business, but there is an opening for an exclusive winter hotel and sanitarium catering to Northern tourists. The supply of our present 3350-foot well is being used, and we are now sinking a similar well. Flow of present well, 180,000 gallons per day. Temperature of water, 147 degrees. Our attractive winter climate makes us the winter training place for the New York Giants. For information and literature address Marlin Commercial Club.

COTTONSEED-OIL

LOCATION FOR COTTONSEED-OIL MILL. The citizens of a thriving little town in Georgia, on the Seaboard Air Line Railway, are anxious for a cottonseed-oil mill, and will subscribe \$15,000 to \$20,000 for the establishment of such an industry if an experienced oil-mill man will invest a like amount; location in center of cotton district, and abundant seed supply is available. Full information on request. J. W. White, General Industrial Agent, Seaboard Air Line Railway, Norfolk, Va.

CREAMERY

WAXAHACHIE, TEXAS, wants a creamery; has 10,000 population, and 80,000 in the county, with 1,276,000 within a radius of 100 miles; Ellis county produces more cotton than any other county in the world; with railroads radiating in five directions and reaching many populous cities; in the famous alfalfa belt of Texas; with an abundance of pure water, fine water-works and sewerage system; now spending \$250,000 on macadamized roads within a radius of 10 miles and leading into the city; with at least 1000 good milk cows to start on within a radius of five miles, and this number would possibly be quadrupled within a short time. Waxahachie has many beautiful homes, 10 church edifices, is the home of Trinity University; public high school affiliated with State University. To a competent, practical man, liberal inducements will be offered by the citizens of Waxahachie for the location of a good creamery here. Interested parties will receive full information by addressing Roy Connally, Secty. Waxahachie Com'l. Club, Waxahachie, Texas.

MISCELLANEOUS

DO YOU WANT
Water Power?
Cotton Mill?
Fruit and Vegetable Farm?
Poultry Farm?
Cattle Ranch?
Timber, Furniture or other Woodworking Plant?
Summer or Winter Home, Hotel or Boarding-house?
Auto. Transportation on Mountain Turnpike?
If not these, state what you desire. We have it. Caldwell & Northern Railroad Co., Chester, S. C.

ARE YOU INTERESTED in securing location for industrial enterprises, such as electric-light plants, ice factories, broom factory, planing mills, overall factories, etc.? If so, address Homer D. Wade, Secretary Central West Texas Association Commercial Clubs, Stamford, Texas.

CISCO, TEXAS.—Cisco will offer good inducements to any and all kinds of enterprises—creamery, broom-corn factory, cotton mill. Cisco is located at the junction of the Texas & Pacific and Texas Central railroads, and has ten passenger trains daily; splendid shipping facilities. From 20,000 to 30,000 bales of cotton marketed in Cisco annually. For further information write to Richard H. McCarty, Secretary Com. Club.

ATLANTA, CASS COUNTY, TEXAS, is in Northeast Texas and one of the most progressive, up-to-date little cities in the State. Opportunities for manufacturing here in Atlanta are second to none in the South. We have natural gas inexhaustible and in any quantity desired, and at a price to factories that will be satisfactory. More hardwood timber than any other county in Texas, estimated at 1,000,000,000 feet, and if anything it will exceed this amount, for high-grade furniture, wagons, etc. Glass sand that analyzes silica 93.14%, oxide of iron 0.36%, alumina 0.35%. Fire clay of highest grade and common red clay first quality for brick. Iron ore, the greatest tonnage in Texas, and so estimated by the U. S. Government, and a high grade. Artesian water at 800 feet that produces over 300,000 gallons of water per day, first class for drinking and boiler purposes. Mineral paint in abundance. Address Cass County Industrial League, Atlanta, Tex.

BELTON, TEXAS.—Centrally located in the "Factory District of Texas"; natural resources and advantages make splendid inducements for manufacturers; is town of solid foundations and growth; want to make it one of the best bucket-brigade towns in the State, and local people are willing to co-operate with outside capital in doing it; offers special inducements to experienced cotton-mill man of some means. Address Davis K. Doyle, Secretary Belton Commercial Club, Belton, Texas.

QUANAH, leading jobbing city Northwest Texas; two wholesale grocery houses, two wholesale produce houses, one wholesale dry goods house; wants wholesale drug, furniture, shoe and implement houses. Great developing country; three railroads; magnificent natural resources. Address Chamber of Commerce, Quanah, Texas.

COTTON MILLS WANTED BY LAWTON, metropolis of Southern Oklahoma; special inducements offered for cotton mills, factories and wholesale houses of all kinds. Lawton is in the cotton belt, far from cotton mills and jobbing centers; ideal climatic conditions; vast tributary country; abundance of best quality of pure mountain water; natural distributing point; eight years old; 10,000 people; capital of Comanche county. Lawton has nine different U. S. Government institutions, each enlarging; five diverging railroads; more building. For special information write Secretary of Chamber of Commerce, Lawton, Okla.

A FEDERATION OF COMMERCIAL CLUBS of N. W. Texas and S. W. Oklahoma will mail pamphlets describing the splendid resources for manufacturing, distributing, diversified farming, business and investment openings in this rapidly developing territory; greatest oil, natural-gas and coal fields in the Southwest. Address J. C. Mytinger, Wichita Falls, Texas.

LEEDS, ALABAMA, on the main lines of the Southern and Illinois Central Railroads, 18 miles from Birmingham, the most rapidly developing town in Alabama. Write for particulars. Alabama Real Estate & Investment Co., C. D. Gilliam, President, Suite 224-5 Brown-Marx, Birmingham, Ala.

"TAMPA IS THE TOWN TO TIE TO." Gateway to Gulf; nearest important American port to Panama canal; doubling population every four years; 100 per cent. city of South; big opportunities for investor, manufacturer, homeseeker; tourists' paradise. For literature address W. B. Powell, Secretary Board of Trade, Tampa, Fla.

THE CITY OF McALESTER, OKLA., located in the heart of the best coal district west of Pennsylvania, offers exceptional advantages to factories; good railroad facilities, good water, good climate, and raw material for many lines of industries; an excellent location for a cotton mill. Interested parties address W. P. Freeman, Sec. Commercial Club, McAlester.

TUPELO, MISSISSIPPI, offers exceptional opportunities for a corn mill, supply store, tile plant, shirt and overall factory (denim and shirting made here), alfalfa mill, etc. Also want wholesale notion and dry-goods house, brick plant. Tradersmen and artisans will find many trades not represented in this progressive city. Local interest in worthy enterprises. Has two lines of railway, Frisco and Mobile & Ohio; new road surveyed and bonds voted for it. Wholesale trade now million annually. Large territory to draw from. Best diversified farming country in Miss. Whites in majority. Farmers now ship alfalfa, poultry, stock. Lands reasonable. Good schools, neighbors and water. If you are looking for a location, investigate Tupelo. Get book of facts. Tupelo is in northeast Mississippi. Unexcelled climate. Address Secretary Business Club, Tupelo, Miss.

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